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LAND AND LABOUR



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TORONTO



LAND & LABOUR

LESSONS FROM BELGIUM

BY

B. SEEBOHM ROWNTREE

AUTHOR OF 'POVERTY: A STUDY OF TOWN LIFE'

MACMILLAN AND CO., LIMITED
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1910

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PREFACE

THIS book is written in the hope of contributing to the solution of the problem of poverty in Britain by throwing some light on its relation to the system of land tenure.

With this end in view I set to work to ascertain the connection between social conditions and the method of holding land in several other European countries, and researches were begun in France, Switzerland, and Belgium. But I soon found that such a task would carry me far beyond the limits of the single volume I contemplated, since my initial question could not be answered without intimate knowledge of all the factors that had any bearing upon it. I decided, therefore, for the present, to concentrate on Belgium, a country whose experience is full of interest, and this book contains the results of four years' close study of all the main aspects of her social and economic life.

After a brief description of Belgium and her people, the history of her system of land tenure is considered, and the system itself is described in some detail. An enquiry was made into the number of landowners and the size of their holdings. The undertaking was laborious, but quite essential to a right understanding of the problem, and I believe that there is no other country in Europe for which similar statistics are available. Figures, also based on a special investigation, are given to show the extent of the mortgage debts of peasant proprietors.

In the next section, dealing with industrial questions, the wages paid in the principal industries of Belgium and the hours and conditions of work are considered. To obtain information that was up to date, another special enquiry was made, which showed that wages in Belgium are extraordinarily low. The reasons for this are discussed in detail, since before we can hope to raise wages we must understand the factors which govern them, and the study of these in Belgium may help us in Great Britain.

In the third section agriculture is treated at considerable length, and the relative advantages of large farms and small holdings, and of proprietorship and tenancy, are discussed. A special enquiry, involving considerable labour, was made into the price and rent of land throughout the country, with a view to determining the share of the profits of successful husbandry which falls to the owner of the soil—a matter of fundamental importance. Besides general farming, market-gardening is dealt with, and the extent to which Belgium provides the food necessary for her own people is shown. The advantages derived from technical education, co-operation, and the provision of cheap credit among agriculturists, and those arising from communal ownership of land and afforestation, are considered, together with the bearing of these and other factors upon the rural exodus.

Next comes a short section dealing with three matters, each vitally affecting both industry and agriculture—namely the transport facilities, the system of taxation, and education.

The transport facilities of Belgium are probably better than those of any other country in the world. Her method of financing her light railways is especially interesting and suggestive, and the standpoint from which she looks at the whole question of transport is worthy of consideration.

In treating the subject of taxation, an attempt is made, first, to give a brief account of the taxes levied, showing whether they do or do not interfere with the economic and industrial prosperity of the country, and, secondly, to show as clearly as possible how heavily they bear upon different sections of the community. To achieve the second object yet another special investigation was necessary, as there are no recently published figures which give the incidence of local rates. A comparison is drawn between the taxation of Belgium, both national and local, and that of the United Kingdom, expenditure and income being analysed under different heads. The arrangement of the accounts is quite different from that ordinarily published, and has been adopted with a view to defining accurately the exact sources of the revenue and the purposes for which it is spent.

Education is dealt with mainly from the general standpoint of national well-being, and particulars which are the outcome of personal investigation are given.

The fifth section of the volume deals with the standard of living. First come the results of detailed study of the household budgets of seventy Belgian families. Specimen budgets are given with descriptions of typical families, and the nutritive value of the dietaries is analysed in such a way as to show how far different sections of the community are adequately fed. By careful enquiry into the cost of living it was found possible to locate the poverty line in Belgium—that is, to find out the minimum sum necessary to maintain a family of a given size in a state of physical efficiency—and to relate it to the wage level. Other expenditure beyond that on food is considered—fuel, clothing, rent, etc.—and the various results are compared with those of a similar enquiry made by me in England.

A chapter devoted to housing is the outcome of an

extensive investigation made in all parts of Belgium, and contains descriptions of working-class houses both in town and country, and the rents paid. The reasons for the extraordinary lowness of rents are discussed, and the cost of building is compared with its cost in England. The interesting and suggestive housing legislation of Belgium is described.

Her methods of dealing with destitution next claim attention. Belgian experience in this matter is helpful both as an object-lesson and a warning.

In another chapter the reasons why unemployment is both less widespread and less serious in its effects than in Britain are discussed.

In the conclusion an attempt is made to summarise the results of the whole investigation, and to point out the directions in which closer acquaintance with Belgium may serve to guide those in Britain who are seeking to improve the lot of the workers.

As the value of an enquiry of this sort largely depends on the methods employed and the trustworthiness of the sources of information, a brief description of these may here be given. The first step taken was to prepare a series of detailed questions on each of the subjects to be studied. After much careful enquiry in Belgium I ascertained the names of a number of experts who were especially qualified to reply with authority to one or more of these questions, and I was fortunate enough to find many of them willing to furnish me with detailed reports. These reports, after having been submitted to one or more Belgians whose wide knowledge and experience made them valuable critics, formed the basis of the investigation. Some of them were very complete, others somewhat meagre, but hardly any of them furnished more than a foundation on which to build.

Looking back on the four years during which I have

been engaged on this enquiry, I realise the impossibility of adequately acknowledging all the aid I have received. Exigencies of space prevent me from mentioning more than a few of the names which I recall with genuine gratitude; but I feel sure that I shall be forgiven by those of my helpers who are not here named.

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has aided me at every stage, both in discussing with me the general lines of the enquiry and in reading through the early drafts of each chapter. Next comes M. Varlez, Avocat, of Ghent—a social student and writer whose name is known far beyond the confines of his own country, who has not only drawn up certain reports, which involved much laborious research, but given me from the beginning to the end of my enquiry the full benefit of his unrivalled knowledge of social matters in Belgium. There is not a chapter in the book which has not benefited by his discriminating and careful criticism. The third is Mr. Lincoln, M.P., who for three years resided in Belgium, superintending the whole enquiry and also making certain investigations himself. Without his unsparing labour, tact, and skill many of the facts set forth in this volume could not have been collected.

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B. S. R.

YORK, *March* 1910.

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PART I

SOME FUNDAMENTAL FACTORS IN THE SOCIAL
AND ECONOMIC CONDITION OF BELGIUM

Land and Labour.

ERRATUM

Page 456, line 24, *for* 18,659 *read* 68,159.

CHAPTER I

GEOGRAPHICAL AND PHYSICAL DESCRIPTION OF BELGIUM

BEFORE entering on a consideration of the social and economic condition of the Belgian people, it is necessary to describe briefly the country in which they live; for social conditions are largely influenced by climate, geographical position, quality of soil, and the presence or absence of mineral wealth.

Belgium is a small country, triangular in shape, and having an area of 11,373 square miles.¹ It is thus about one-eighth the size of Great Britain, and rather less than twice as large as Yorkshire. It has 42 miles of sea-board, the four principal ports being Antwerp, Ghent, Bruges, and Ostend. Only the last of these is on the sea-coast, the others being approached from the sea by rivers or canals. The greatest length of the country is 180 miles from the north-west to the south-east. Its greatest breadth from north to south is 110 miles.

As regards the altitude of the land, Belgium may be called an inclined plane. Starting from the dunes along

¹ This area is divided as follows: (a)—

	Acres.
Cultivated land	4,734,224
Woods and forests	1,288,093
Uncultivated land	418,243
Built over or used for some other taxable purpose	486,856
Inland waters, roads, etc.	348,109
Total	<hr/> 7,275,525

The population of the country in 1900 (the date of the last census) was 6,698,548.

(a) *Recensement agricole*, 1895.

the sea-coast, which are practically at sea-level, the country rises very slowly, culminating in the hilly district of the Ardennes in the south-east.

This district, with its fine wooded scenery and hills rising to about 2000 feet, forms a striking contrast to the flat sandy districts in the north and north-west, which are very similar in general characteristics to Holland.

Although Belgium is a small country, it exhibits a great variety of geological formations. Not counting the narrow strip of dunes along the sea-coast, it may be said that, roughly speaking, it is divided into a series of pretty clearly defined zones running from east to west, each having a different kind of soil, and requiring a different cultivation.

To the north is a narrow zone called the Polders, which consists of stiff clayey soil; south of that comes a broad zone of sandy soil, then a broad zone of loamy soil, which in some places is rather stiff and in others rather sandy. South of this again is a smaller zone of stiff soil with a good deal of clay in it, known as the Condroz region, and yet farther south the hilly region of the Ardennes, where the soil is generally poor. In the extreme south-east is a small region known as the *Région jurassique*, where the geological formation is principally limestone.¹

The variation of the soil in these districts plays so important a part in the agricultural economy of the country that it will be worth while to give a brief description of them.

THE POLDERS

This region lies along the sea-coast, stretching inland to a distance of from 6 to 9 miles. It is practically on the sea-level, being protected by dykes; indeed, the land has only been won from the sea through the patient efforts of mankind. The maintenance of the dykes requires constant care and work, and is paid for by a special contribution levied upon every landowner in the locality.

¹ The map at end of chapter shows the different zones.

The soil consists of heavy clay, and very strong teams are needed to plough it. The recently reclaimed lands produce magnificent crops, but after a time the soil becomes somewhat exhausted and requires a good deal of manure to make it fertile. There are many rich meadows here. The principal plants cultivated are barley, winter barley, wheat, peas, horse-beans, oats, and, to a less extent, beetroot and a few potatoes. Horses and cattle are bred in this district—chiefly cattle.

SANDY REGION

To the south of the Polders lies a sandy region, stretching almost across Belgium from east to west. It is divided into two parts, the Campine lying to the east, and Flanders to the west. The latter is often described, particularly by foreigners, in glowing language, as “the fertile plains and fat meadows of Flanders.” They are, indeed, productive, but they owe it to the labour of man. There is scarcely any soil in Europe so infertile by nature, and if abandoned for only two or three years it returns to barren waste. Constant care and enormous quantities of manure are required if good crops are to be obtained. A proprietor whose farm has been neglected by a bad tenant is glad to let it to a capable farmer rent-free for some years, that it may be brought into good heart again.

This region has four characteristics: a great variety of crops, intensive cultivation, very small farms, and second harvests (*récoltes dérobées*).

The aspect of the country is very different from that of the average agricultural region in Britain. There are many small villages, and far and near among the fields are dotted little cottages, often whitewashed and with red roofs, in which the cultivators live close to their work. Here are no great pasture farms employing scarcely any labour, but everywhere the peasants are busily engaged in cultivating the soil. The main crops are wheat, rye, barley, potatoes, flax, hemp, colza, fodder, and beetroot, but many others are grown in smaller quantities. The

culture here is the most intensive in Belgium, and, with the exception of the market-gardens around Paris, the most intensive in Europe. Manure of all kinds is carefully preserved and used on the land; nothing is wasted. Fields have to be remanured two and three times a year, and the second crops, and even the seeds in the spring-time, are watered with liquid manure. Thanks to the diffusion of agricultural science, the Flemish peasant, although very apt to work in a rut, is becoming increasingly alive to the value of chemical manures, and every year he uses more and more of them.

According to official statistics, nearly one-third of the soil in East Flanders yields two crops annually, and in the vicinity of Ghent the proportion rises to one-half. It is solely due to the excellent methods employed that such poor soil is able to maintain so dense a population. Almost the whole of the work is done with the spade, as it cannot be done properly by ploughs. The cultivation in Flanders contradicts the statement sometimes made that only by farming on a large scale can a suitable rotation of crops be maintained, and that small cultivators cannot devote enough capital to their land to obtain the best results. While, however, the sandy soil of Flanders has been made extraordinarily fertile, this cannot be said of the eastern portion of the sandy zone. This is a large region covering much of the two provinces of Limbourg and Antwerp, and a small part of Brabant, and is known as La Campine. Its soil is fine sand and sandy clay, with very little cohesion. It is one great plain, nowhere attaining an elevation of more than 240 feet, the depressions in it being occupied by marshes and peat bogs. It is the poorest part of Belgium; the population is sparse, and there are many signs of destitution. Around the villages the patient toil of the people has brought some of the land under cultivation, but there still remain great waste tracts. Occasionally, as one travels through these, one comes upon a little homestead, very primitive in construction, occupied by a struggling peasant who is waging a hard battle against "the niggardliness of nature."

There is a large amount of common land in the Campine, and although much of it is still uncultivated, the energy and enterprise of the State Forestry Department are causing steady progress in afforestation. Nearly 125,000 acres were afforested in the last half of the nineteenth century.

While the general aspect of the country gives an impression of poverty both of soil and people, there is already evidence of changing conditions. The growing pressure of the population will make it impossible for any region to stand still. Just as in earlier times the sandy soil of Flanders was made profitable, the Campine will be conquered by the persistent and patient efforts of man and his improved agricultural methods. The principal crops here are potatoes, oats, and rye; but dairy-farming is the great mainstay of the inhabitants, and many farms are devoted almost solely to this branch of agriculture. Most farms are small, from 5 to 15 acres, one of from 40 to 60 acres being looked upon as large. Probably the condition of things in the south-east will soon be radically altered, for in 1901 coal was discovered there, and numerous experimental borings since made indicate the presence of coal-fields of considerable size.

LOAMY REGION

South of the sandy zone lies a zone of loamy soil. About a quarter of it consists of sandy loam, and the remainder of loam containing a good deal of clay.

The sandy loam district is very fertile, and has an undulating surface with large gentle slopes, which have proved favourable alike to the growth of crops and to the encounters of great armies; for they contain memorable battlefields,—Jemappe, Fleurus, and Waterloo. The stiff loam, which, as stated above, occupies three-quarters of the total area, varies greatly in quality, being much heavier in some parts than in others. Generally speaking, however, the region is one of strong land, containing a good deal of clay, and requiring strong teams to work it. Many large farms are to be found here, especially in the districts of La

Hesbaye and Namur, and in the southern parts of the provinces of Hainaut and Brabant, where they are sometimes 250 or 500 acres, or even more. But here, as throughout Belgium, many small farms are dotted over the country-side. The character of the soil favours stock-raising and the cultivation of cereals on a large scale. It is especially suited to sugar-beet, which is by far the most important product, and has been grown on some farms every other year for fifty years, without any deterioration in the quality or quantity of the crop. Considerable capital is required, both for the crop itself and for the purchase of animals to eat up the pulp, which is returned to the farmers from the sugar works after the sugar has been extracted. The introduction of beetroot has had an important influence upon the agricultural progress of this region. It has increased the return from the land, and the care necessary in its cultivation has done much to educate the agricultural population.

In the south-east part of the loamy region lies the district known as the Herve, which, though small in area (150,811 acres), is interesting from an agricultural standpoint. The conditions are of primitive simplicity, and resemble those of the high Alps. Although the highest part is only 1150 feet above sea-level, the land is completely given up to pasture, as in the Swiss mountains. The soil is a very stiff loam, which is difficult to till, but retains humidity, and thus favours the growing of grass and fruit. On every side are little hillocks covered with fine green grass. Not a ploughed field, not a furrow breaks the velvet carpet which extends far and wide. The whole country, indeed, is one continued pasture, where magnificent spotted cows graze; and in travelling through it, one cannot fail to be struck by its resemblance to the pasture counties of central England. The rural economy of this region only knows the most simple processes. The rôle of the farmer is less important than that of his wife; for it is she who directs and carries out all operations in the dairy, which is the most important source of revenue. The

farmer looks after the fields and hedges, and takes the produce to market; but it is the woman who makes the cheese and the butter. The size of the farms is always stated in terms of the number of cows kept, and they usually vary from "three-cow farms" to "twenty-cow farms." Pig-fattening has increased largely during the last few years, and thousands of pigs are exported annually from this small district, particularly to Germany. Fruit-growing likewise has assumed considerable proportions, and many farmers are said to pay their rent out of the proceeds of the fruit-trees which they have planted in the pastures.

CONDROZ REGION

Turning south from the loamy zone, we come to the Condroz region, covering 1,354,378 acres. It consists of schistose, calcareous, and quartz rocks, which, when decomposed, form a clayey soil. Its altitude varies from 650 to 1150 feet.

The mineral products of the district are very varied; besides coal, there are marble, sandstone, and freestone. The principal crops grown are rye, wheat, spelt, oats, and a great deal of winter barley, also potatoes and various root crops to serve as food for the cattle, which are bred largely here. Even more than the loamy zone to the north, this is a district of large farms. Undoubtedly, many of them are larger than the capital at the disposal of the farmers justifies, and in such cases the cultivation is poor; but here, as elsewhere in Belgium, the tendency is for these to be broken up. Beside the large farms, there are many small plots of from $2\frac{1}{2}$ to $7\frac{1}{2}$ acres, tilled by peasants or agricultural labourers, and a great number of still smaller plots cultivated by industrial workmen in their leisure time.

THE ARDENNES

South-east of the Condroz is the region of the Ardennes, covering 1,037,822 acres. This is the most hilly part of

Belgium. Its average altitude is 1381 feet, the highest point — “Baraque Michel” — being 2204 feet. The primitive rocks of which it consists yield on decomposition impermeable clay. On the highlands this clay retains the moisture, and marshes (*fagnes*) are formed.

Forests of beech, oak, and pine occupy about two-fifths of the Ardennes. Many of these belong to the communes, and are an important source of income. Besides the forests, there is still a considerable amount of uncultivated land. Twenty years ago tillage was only met with in the immediate neighbourhood of the villages, sheep-farming being the principal occupation of the people; but this condition of things has been rapidly modified, thanks to the development of means of communication, and the employment of chemical manures; and the latter seem destined to produce yet greater changes, since through their use land which would formerly have seemed hardly worth cultivation becomes profitable. Until quite recently, the custom in many districts of the Ardennes was to make use of the soil only once in ten or fifteen years. The coarse turf which had grown up was pared off, dried, and burnt, the ashes serving as manure for a single crop. Fortunately, these methods of cultivation are being replaced by more scientific ones. The principal crops are rye, oats, potatoes, and fodder. Tobacco is also grown in the neighbourhood of the river Semois. The size of the farms is extremely variable. Those of from $7\frac{1}{2}$ to 75 acres are spoken of as small, those of 150 acres and above being considered large. There are many small proprietors.

In spite of an agriculture which produces comparatively little per acre, and the absence of important industries, the people in the Ardennes are better off than those in Flanders, and wages are comparatively high. It is difficult to hire labourers for less than 2s. a day, and the poorest of them is as well fed as many a cultivator in the west of Belgium with a capital of a few hundred pounds. There is no need to enter in detail into the causes of this comparative well-being, suffice it to say that through the use of chemical

manures, and the opening up of the country by an extensive system of light railways, much land hitherto unprofitable has been brought under the plough. Moreover, rents have not yet risen to so high a point, even for the best land, as in the more densely populated parts of the country, and thus a greater share of the products of their labour is left to the workers. In addition to these factors, the people are the most intelligent and best educated in Belgium. Indeed, the district furnishes so many of the civil servants in the various Government offices in the capital that it is nicknamed "*la pépinière des fonctionnaires*"—"the nursery garden of civil servants."

LIMESTONE REGION

Only one small part of Belgium remains to be described. Right away in the south-east, hidden behind the Ardennes, is the district known as the *Région jurassique*. Geologically, it is a mixture of hard and soft rocks: the soft ones are being worn away, leaving depressions or valleys. As a rule the hill-tops are wooded, the sides being cultivated, and the lowlands laid out in pasture. The soil of the district varies greatly, from heavy clay to light loam. Large farms are few and far between. The primitive triennial rotation of crops predominates, under which land is left fallow every third year. Protected from the cold north winds by the hills of the Ardennes, the climate is less severe than in the latter district, and the products are more varied. The standard of well-being is comparatively high, and if there is no great wealth, there is but little poverty.

From the above descriptions it will be clear how greatly the soil of these regions varies, and in order to appreciate fully the influence of its variations on the agriculture of the country, we must know approximately what proportion of the total land of Belgium is covered by each of the different zones. These proportions are as follows:¹

¹ *Recensement général de l'agriculture, 1880.*

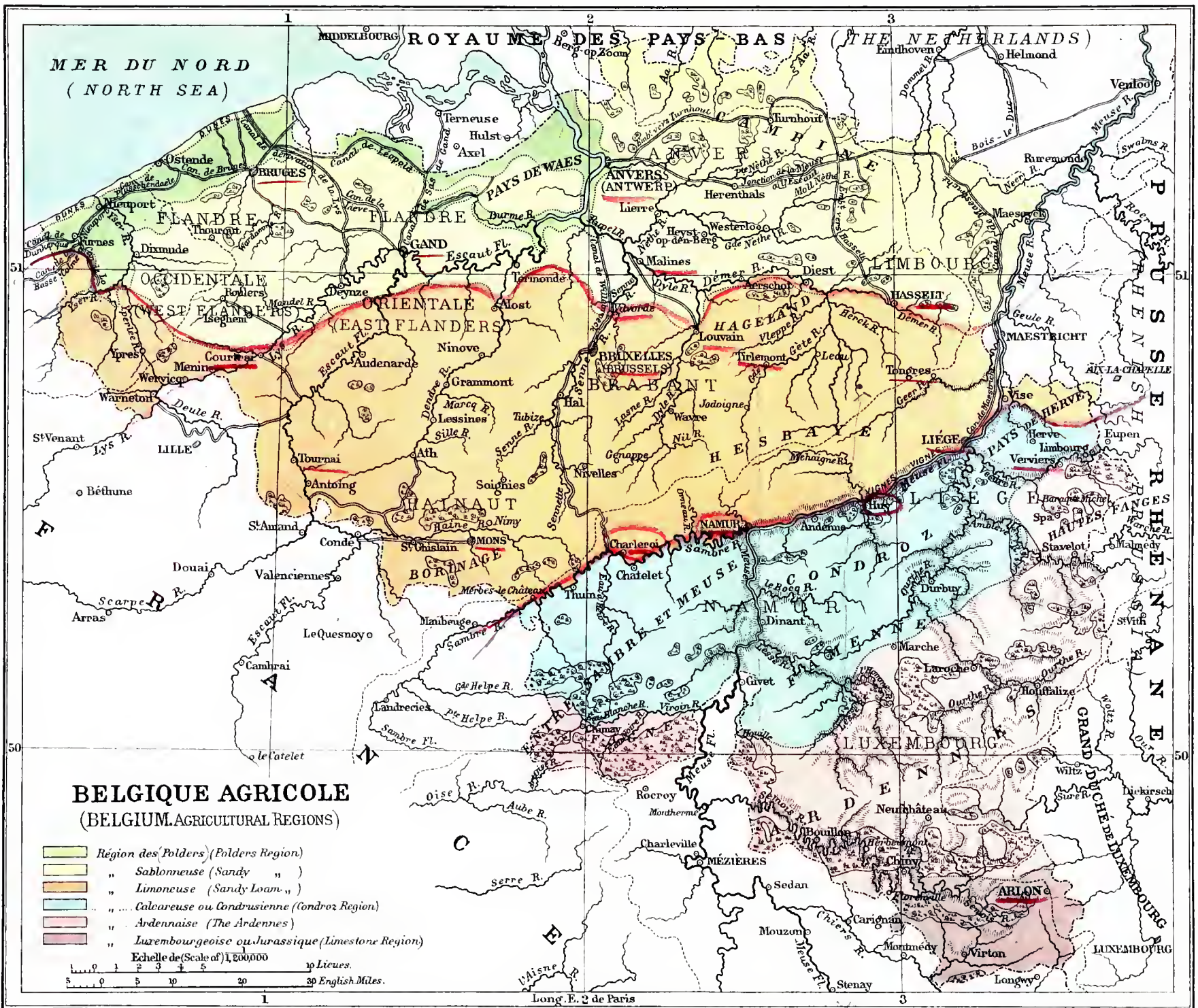
	Acres.	Per cent.
The Polders (strong clay)	240,341	3
Sandy Zone (E. and W. Flanders, Campine)	2,022,031	28
Loamy Zone (sandy loam)	667,473	9
Loamy Zone (stiff loam, including the Herve)	1,720,170	24
Condroz (clayey)	1,354,378	19
Ardennes (high land)	1,037,822	14
Jurassique (limestone)	233,207	3
	7,275,422	100

The two great rivers of Belgium are the Scheldt in the west and the Meuse in the east. Both have their sources in France, and flow through Holland before entering the North Sea. Antwerp, one of the most important ports in the world, is situated on the Scheldt. The Meuse is two-and-a-half times as long as the Scheldt, but is neither so wide nor so deep, and it has been artificially deepened in many parts to make it navigable. It traverses the hilly and woody district in the south-east, and has long served an important purpose as a highway for the distribution of the coal, timber, and stone obtained in that part of the country. It may be called the river of industrial Belgium, just as the Scheldt is the river of agricultural Belgium.

Only one other river need be mentioned, namely, the Lys, which is a tributary of the Scheldt. Although small, it has played an important part in the industrial development of the country, because flax prepared in its waters produces the finest linen in the world. The establishment of the textile manufacture in Belgium, still one of its principal industries, was primarily due to this fact, and it is not surprising that the Lys has come to be known as the "Golden River." It is curious that chemists have hitherto entirely failed to ascertain why flax prepared in its water produces such fine linen.

The rivers of Belgium are linked together by an extensive system of canals, measuring altogether 604 miles. In addition, there is the most complete system of railways in the world. These are described in Chapter XXI.

Belgium is rich both as regards the amount and variety of her minerals. Coal is found in various districts, notably



St. Brond

in the neighbourhood of Liége in the east and in Hainaut in the south-west, and more than a hundred thousand miners are employed in extracting it from over a hundred mines. Iron, zinc, lead, and manganese mines give employment to another 16,000 miners; while marble and paving-stones, limestone and slate are extracted from about a thousand quarries, employing more than 35,000 men.

The climate is moderate, being, on account of Belgium's proximity to the sea, less severe than that of Germany, and damper than that of France, but drier than that of England. Except in the Ardennes, frosts rarely appear before the middle of October or after the middle of April. In the lower lands, that is, in the north and north-west, the mean annual temperature is 50° F. As a rule the thermometer does not fall below 59° F. or rise above 86° F. As already stated, however, the ground gradually rises from the seaboard towards the south-east, and with the rising altitude the temperature becomes somewhat more severe; but the differences are not important. All kinds of cultivation are found in all parts of Belgium, even in the Ardennes, though here rye usually replaces wheat, and harvests are late, the first fall of snow often coming before the oats have been garnered. Here, too, the potatoes are occasionally frozen, and the fruit-crops are poor both in quality and quantity. Horses, cows, and sheep are of a smaller race than in the lower regions of the country.

This brief account of the natural conditions of Belgium may help the reader to appreciate the facts to be set forth in this book. Before we begin to examine her present social and economic conditions, a similar outline of her history must be given.

CHAPTER II

HISTORY AND CONSTITUTION

FROM an ethnological point of view, Belgium represents a drawn game. For many centuries she has been the arena of two contending civilisations, Latin and Teutonic, neither of which has conquered or absorbed the other; and her national unity, though it transcends this curious duality, throws it into strong relief.

A remarkably straight line of demarcation runs through the country from east to west, dividing it into two portions, practically equal in extent and population, and inhabited by two distinct peoples, each with its own language and racial characteristics. On the north are the Flemish, with their Teutonic dialect; on the south the Walloons, speaking French or some Latin patois; and so clearly cut is the invisible boundary that, with the exception of Brussels, no district on either side is bilingual.¹

Cross it, and one finds not only another language, but another method of cultivating the soil. The Flemish peasant literally lives on the land he tills, leaving the village to officials, the *curé*, and industrial workmen; while the Walloon lives in the village, and goes to and fro to farm his land. Other differences, to be described later, are equally striking; but let us first examine the sources of the curious anomaly presented by Belgium.

If it be true that happy nations have no history, Belgium

¹ This statement refers to the mass of the inhabitants. But Flanders is bilingual in a curious fashion of its own; since, while the uneducated people speak Flemish, those of wealth and social standing have for eight or nine centuries spoken French.

is singularly unfortunate, for her history is chequered and eventful to the last degree. Open on every side to attack; by turns or simultaneously invaded or possessed by Gauls, Romans, Franks, Burgundians, Spaniards, Austrians, Dutch, as it happened to be, the wonder is that, in spite of all, she has striven towards, and ultimately attained, national independence.

In the first century, when the power of Rome was at its zenith, Belgium, like the rest of Gaul, fell under the Latin sway. But in the third century Rome was a declining power, no longer vigorous enough to defend her own frontiers, and hordes of German marauders invaded the north of Belgium, putting to death great numbers of the latinised inhabitants, and destroying the Latin civilisation. Their southward march, however, was checked by the forests of the Ardennes and those stretching across Central Belgium, which formed a natural barrier against invasion; and they turned west, leaving the valley of the Sambre, and Hainaut, already prosperous, to expand peacefully, under the Latin rule, which had been overthrown in the north.

For some time, in the south of Flanders and the region of Tournai, the Teutonic invaders held their own, but when the Franks, who had led them there, set off to complete the conquest of France, they were no longer strong and numerous enough to keep what they had won. Instead of suppressing the old civilisation they yielded to it; and soon, except in the districts first invaded, the Teutonic language and culture had left nothing but a name.

Later on, when the invasions were over, the great convents in the south of Belgium acquired large tracts of forest land, which the monks began to reclaim, thus spreading the Latin tongue through the whole region. Meanwhile the Teutonic tribes, who, in the north, had retained their mastery, set to work to cultivate the Campine and the marshy districts along the seashore.

For centuries Belgium was primarily an agricultural country. Bishops, abbots, and nobles alike drew their wealth from the land, whose fertility increased wonderfully,

especially in Flanders and Hainaut, "the granaries of Belgium." In the eleventh century, however, the towns began to develop; and so great and rapid was their growth that they became the dominating factor in the country's life, agriculture being relegated to a second place, and allowed but little say in political matters. But wise and powerful princes, notably those of the house of Burgundy, tried in the fifteenth century to restore equilibrium and make town and country sharers in one national life, and to some extent they succeeded.

In the sixteenth century the large towns, having flourished industrially, politically, and commercially, began to decline. The severe measures taken in them to suppress religious disturbances led to emigration, and for three centuries, in which Belgium had no prince of her own, but was governed by turns from Madrid, Vienna, and Paris, her social and even her industrial activity centred in the country and the smaller communes, which were busy and prosperous, in spite of apparent national decadence.

It was in this period of administration from without, in which patriotism and public spirit were forced back upon themselves, that the Belgian became absorbed in local interests. His country was ruled by foreigners, and he was a mere pawn in the game. There were no European interests and wide horizons for him. All the more he concentrated his energies on the small sphere in which he could assert himself, and which he could really influence. He flung himself into communal life, and out of that life, with its fellowship in aims, in sufferings under an alien rule and hatred of the alien, there sprang a deep sense of real unity. The nation really lived, not in the Court or central Government, but in the individual communes.

From this period Belgium's agricultural prosperity also dates. While the large towns declined under the stern control of the foreigner, the Belgian, debarred from the region of politics, found an outlet for much of his natural energy in turning the desert land into a fruitful garden.

Later on, after the French Revolution, with its far-

reaching social and economic consequences, the towns of Belgium recovered lost ground, and commerce extended as it had never done before. This development continued, till to-day, as in the thirteenth century, the country is on the whole industrial and urban, rather than agricultural. But the Belgian's love of the soil is far too deeply rooted to be shaken; and especially in the Flemish provinces he is still a farmer at heart.

To return to our initial problem, how is it that in Belgium two very different races dwell side by side as one nation? Why have they always adhered to each other as by magnetic attraction? Why has not each race reverted to the ethnological group of which it is a broken offshoot, Flemish to Teutonic, and Walloon to Latin? At the first glance, the country's political vicissitudes, in which one sway has so frequently replaced another, have afforded many opportunities for such a readjustment.

Looked at more closely, however, we shall see that this has not really been the case. Throughout the history of Belgium, political, ecclesiastical, and administrative divisions have never coincided with her natural divisions of language and race. After the death of Charlemagne most of the Flemish portion of the country was joined to France, while the Walloon provinces fell under the rule of the German Empire; and this is an instance of what has perpetually happened. Under the feudal system, each of the great vassals resident in Belgium was overlord at once of Flemish and Walloon villages. The Count of Flanders, himself a vassal both of the King of France and the German Emperor, governed French Flanders, Flemish Flanders, and Imperial Flanders simultaneously. Ecclesiastical divisions were just as irrelevant to racial distinctions, which were practically treated as if they did not exist.

It is certain, however, that if the end in view had been to bring different civilisations into the closest contact, a better system could hardly have been devised; and we see the result in Belgium to-day. In her provinces, and much more in her towns, she has felt the shock and also the

stimulus of this compulsory interchange, not only of commodities but of ideas and thoughts; and, as it were in spite of herself, she has become cosmopolitan.

The typical Belgian is without the exclusiveness of his neighbours, more receptive, more international, and singularly adapted to the rôle of intermediary which it is his part to play. To some extent the history of Belgium resembles that of England; but in the latter country the fusion of different races has been more complete, and has established a great kingdom; while in Belgium, although the contact of two peoples has profoundly affected each, they still dwell separate, side by side.

The Flemings possess the characteristics of a lowland Teutonic race. Tall, big-boned and fair, essentially practical, and perhaps a little lacking in imagination, this race has for centuries striven to attain agricultural prosperity in the face of almost insuperable odds. The fact that out of a soil consisting largely of barren sand, the Fleming has produced some of the most fertile land in Europe, is a fine testimony to his dogged perseverance and power of almost unceasing toil. Although somewhat limited by routine in his methods, and slow to take up new ideas, he is a born agriculturist. "Scratch a Flemish industrial workman"—goes the Belgian saying—"and you will find a farmer underneath." But his activity has not been entirely devoted to agriculture, for the history of Belgium during the middle ages, and indeed later, was largely the history of Flemish towns—of Bruges, Antwerp, Malines, Ypres, Ghent, Louvain, and others—and the grandeur of the buildings which still remain tells us how prosperous must have been the old merchants and manufacturers who built them. The glory of some of these towns has faded; but Antwerp and Ghent are, more than ever, important centres of industry and commerce. In industrial life the Fleming is recognised as a hard-working and loyal servant, perhaps less versatile and intelligent than the Walloon, but willing to undertake arduous labour without complaint, for very little pay. Perhaps he has learnt that only on such terms could he win a livelihood

from the infertile soil of Flanders, and thus he has become accustomed to accept as natural, conditions to which other races might not be willing to submit.

In the Flemish country districts the people remain almost absolutely faithful to the Catholic Church, whose ministrations they receive gladly, and whose faith they accept without question, but in the towns the priests find increasing difficulty in retaining the loyalty of their followers.

The Walloon is almost the exact antithesis of the Fleming. He has neither his stolidity of character nor his power of perseverance. Where the Fleming is laborious and parsimonious in his habits, living very simply even though he may have a considerable sum standing to his credit at the bank, or locked up in land or farming stock, the Walloon lives for to-day. He means to enjoy life, and will spend his last penny in the effort to achieve this end, letting the morrow look after itself. Hospitable to a degree, he is always ready to enter jovial company, and spend his time in good-humoured gossip. He is as vivacious as a Frenchman, and the Church has as little hold upon him. He learns more quickly than the Fleming, and is altogether better educated. His mind is less stereotyped, and he more readily adopts new ideas. The differences between the two races are accentuated by the fact that the proportion of persons engaged in industry, as contrasted with agriculture, is considerably greater in the south of Belgium than in the Flemish parts. Practically all Belgium's coal and iron, with the metal industries which accompany them, are found in the southern region, so that the influences acting on the mind of the Walloon are those of the town rather than of the country.

All this does not mean that the two races found in Belgium have no traits in common. Both are marked by a delightful *bonhomie*, much appreciated by a foreign investigator. Both possess a remarkable power of adaptability, which has enabled them, without any great inventiveness, to compete with other nations with a large measure

of success, in almost every sphere of activity. Borrowing from the French some of their taste, from the Germans some of their commercial acuteness, and from the British some of their mechanical skill, Belgian industrialists have conquered for their goods markets all over the world.

While the fact that Belgium is a bi-lingual country is a drawback in some respects, the qualities of the two races are largely complementary, the one supplying what the other lacks; and this is undoubtedly a source of strength.

Such are the people whose country and institutions we are about to study. Before turning to our main inquiry, a few introductory words must be said about the Belgian Constitution, and other matters which largely influence social and economic conditions.

CONSTITUTION

The Government of Belgium is a constitutional, representative, and hereditary monarchy. The legislative power is exercised collectively by the King, Chamber (Lower House), and Senate (Upper House). Each of these has the right of initiating legislation, except in the case of financial and military matters, where the right rests solely with the Chamber. All bills, however, including financial ones, must pass both Houses and receive the assent of the King before they become law. In practice the royal assent is never withheld.

The executive power belongs to the King, but can only be exercised through his responsible ministers. He appoints the Prime Minister from the ranks of the parliamentary majority, and he, in his turn, appoints the other ministers.¹

Belgium has a universal male adult and plural suffrage, and was the first country to adopt proportional representation. The Lower House is elected by direct vote of the

¹ Theoretically the King appoints all ministers, and he is not obliged to make his selection from the ranks of the parliamentary majority, nor indeed from among members of Parliament. In practice, however, the facts are as stated above.

people. The franchise is somewhat complicated; a man may have as many as five qualifications to vote, but may only exercise three of them in elections for the Chamber. The fact that four of the five qualifications depend upon the ownership of property, or the attainment of certain educational diplomas, places the poorer and less educated classes at a considerable disadvantage. There are 166 Deputies in the Chamber—one for every 40,000 inhabitants. They are elected every four years, but, as half of them retire every second year, there is never a general election, except when Parliament is dissolved.

The members of the Upper House (Senate) are also elected by direct vote of the people on the same franchise as the Chamber, except that electors under thirty years of age may not vote. Their number is 83—*i.e.* one to every 80,000 inhabitants. To be eligible for election, a man must be forty years old and have certain property qualifications.

In addition to the 83 elected Senators, there are 27 nominated by the Provincial Councils, who need have no property qualifications. The Senators are elected for eight years, half the number retiring every fourth year. Ministers have seats in both Houses, but may only vote in that to which they have been elected.

For administrative purposes Belgium is divided into nine provinces. These are divided into forty-one arrondissements, and these again into 2627 communes.¹ The provinces are administered partly by Governors appointed by the King, and partly by representative bodies. The government of the communes is in the hands of popularly elected Councils, under the leadership of a Mayor or Burgomaster, who has much more power than the Mayor of an English town. He may, for instance, imprison a drunken

¹ For judicial purposes the country is divided into 27 "judicial arrondissements" and 200 cantons, which bear no relation at all to the administrative arrondissements. For the purposes of this volume, however, these divisions are unimportant.

It should be noted that the number of communes is subject to alteration with the growth and movements of the population.

or disorderly person for twenty-four hours without a formal trial, and may order any house to be closed which he considers insanitary, with no right of appeal. He is proposed by the Council, but appointed by the King,¹ and, though each appointment is for eight years only, he usually holds office for life.

The communal franchise is very similar to that for the Chamber, but qualified electors may use four of their votes instead of three, and all electors must be at least thirty years of age and have resided three years in the commune.

The degree of autonomy of the Belgian communes is a fact which calls for comment. To an extent unknown in Britain, each commune is a self-governing body, only slightly controlled by the Central Government. Partly, perhaps, as a result of this, local feeling is very strong. Communal rather than national matters take the first place in the mind of the Belgian, and hence it is extremely difficult to organise any national movement. For instance, the attempts made by the Socialists and Trade Union leaders to break through this strong communal sentiment and to found national organisations have met with very partial success.

POLITICAL PARTIES

The principal political parties in Belgium are Catholics, Liberals, and Socialists. The Catholic party is Conservative, but it has a democratic wing of growing importance—whose most advanced members are, however, Catholics first and democrats afterwards.

The tendencies of the Liberals are largely those of the old British Whigs, but they have a number of followers whose policy is much more radical than that of the main body of the party, and who lean strongly towards the Socialists in many of their sympathies.

The labour party, which is frankly Socialistic, is grow-

¹ Occasionally the King refuses to appoint the Council's nominee, indeed he has always refused to appoint a Socialist Burgomaster, even when repeatedly asked to do so by Socialist Councils. This serves to remind us that the executive power of the King is something more than a form.

ing in strength, and undertakes an active propagandist movement. The Catholic Church has allied itself so completely with the Conservative party in the State, that the latter is always spoken of as the "Catholic Party." In consequence of this, and in the virtual absence of any church in Belgium which the Labour Party feels to be in sympathy with its social aspirations, its members have cut themselves off from all forms of organised religion.

In addition to the three main parties there is a small fourth one—the Christian Democrats—but it is as yet of little importance as a political force. The relative strength of the different parties in the House of Representatives and the Senate is as follows:—

HOUSE OF REPRESENTATIVES. 166 Members.

87 Catholics.
43 Liberals.
35 Socialists.
1 Christian Democrat.

SENATE. 110 Members.

65 Catholics.
38 Liberals.
7 Socialists.

These figures do not, however, represent the real strength of the parties in the country. At the last elections (half the country in 1906 and half in 1908) the votes cast were distributed as follows:—

	1906.	1908.
For the Catholics	636,446	524,244
For the Liberals, Socialists, and all other opponents of Catholics	536,583	660,359
<i>Catholic majority</i>	99,863	<i>Opposition majority</i> } 136,115

Thus, although the Catholics are in a majority in the Chamber, they have, taking the two elections together,

actually received fewer votes than the Opposition. This anomaly is due to the fact that there is greater unity among the different sections of the Catholic party than among those of the Opposition.

The Catholics have been in power since 1884, but their majority in the Chamber has been diminishing for some time, and is now (1909) reduced to eight votes. The remarkable influence which the Catholic Church exercises over its members is well known, and so long as a Catholic voter remains faithful to her he remains faithful to his political party.

A fact in connection with Belgian party politics which strikes an outsider is the deep cleavage which they carry into the whole social structure. It is a matter of great surprise to a Belgian to learn that in Britain keen political opponents may be close personal friends, a thing which in his country would be almost impossible. There is extraordinarily little social intercourse between Catholics and Liberals, and practically none between Catholics and Socialists. Politics enter into almost every phase of social activity and philanthropic effort, and it is the exception, rather than the rule, for persons holding different political opinions to co-operate in any other matter. Thus, in one town there will be a Catholic, a Liberal, and a Socialist trade union, a Catholic, a Liberal, and a Socialist co-operative bakery, a Catholic, a Liberal, and a Socialist thrift society all catering for similar people, but each confining its attentions to members of its own political party. The separation extends to cafés, gymnasia, choral, temperance, and literary societies, indeed it cuts right through life. There is everywhere this division of the social forces, leading to a serious dissipation of power. Moreover, it often happens that one of the parties in any particular town is not strong enough to maintain an organisation. In such cases its members must either dispense with its benefits, or leave their party in order to enjoy them elsewhere. Such adhesion to a political party through economic pressure tends to political and religious hypocrisy, and

is thoroughly unsatisfactory. Social work on a neutral basis, although often tried by independent groups of reformers, has seldom succeeded; the Belgian farmer or labourer has become so accustomed to look to his party chiefs for guidance that he only sees in attempts at neutral organisation a possible trap of the enemy. It is obvious that the Catholic party has a great advantage over all others by having resident in every commune, however small, a vicar placed in a position of power, who can act as their agent. The political workers on behalf of this party are likewise reinforced by the great number of priests and nuns who are in the closest contact with the needs of the population, especially of the poorer classes. No ordinary system could ever hope to attain an organisation equally effective and economical.

RELIGION

There is no census in Belgium of the number of persons belonging to different denominations. The members of the Roman Catholic Church, however, so far outnumber those of the Protestant and Jewish communities that these may be considered insignificant. Except for a possible 20,000 Protestants and 4000 Jews, practically every Belgian who is not a Catholic is a Freethinker.¹ In the Flemish country-side almost every one attends mass on Sundays; while on the other hand, in the towns all over the country, and throughout the Walloon part of Belgium, there are a great many people, and their ranks are growing, who are unassociated with any form of organised religion. But, taking the country as a whole, there is no doubt that the number of those who are more or less faithful to the Catholic Church is much greater than that of all classes of seceders. No Protestant propaganda seems to have

¹ In addition to those named above, there are about 50,000 foreign Protestants residing in the country. According to the Census of 1900 there were in Belgium 157 Protestant ministers, 7435 Roman Catholic clergy, and in addition 6257 men and 31,668 women belonging to religious congregations (Catholic).

been successful; not even the Salvation Army, with its missionary zeal and power of organisation, has produced a lasting impression.

Freemasonry in Belgium is an anti-Catholic movement, which exercises considerable influence upon Liberals, and, to a much smaller extent, upon Socialists. The movement has never been so strong as it is now, and much propagandism is undertaken on its behalf.

THE MILITARY SYSTEM

With a few words about the Belgian military system these brief introductory remarks may conclude. Although legally it is modelled on a basis of voluntary service, any deficiency in the ranks being made up by conscription, in practice the number of volunteers is insignificant. All males over twenty-one, except those in religious orders, may be called upon to serve their term; but, as the army is a small one (only about 43,000 on a peace footing), the number of men called up is not great. They are selected by ballot; any one who draws an unlucky number can evade service by paying a substitute, but as this costs about £64, it can, in practice, only be done by comparatively wealthy men.¹ The term of service for conscripts in the army is either two or three years, according to circumstances, followed by ten years in the reserves.

In addition to the regular army, a citizens' army was created in 1897 as a reserve force. This consists of about 46,500 men, and in character it resembles the Territorial Forces of Britain. The country has no navy, and the military fortifications are limited to the entrenchments of Liège and Namur and the fortress of Antwerp. In the chapter dealing with taxation it will be shown that the *per capita* burden of military expenditure in Belgium is very low as compared with that of Great Britain.

¹ Since this was written a law has been passed forbidding substitution, and somewhat modifying the method of selecting conscripts.

CHAPTER III

HISTORY OF LAND TENURE

It is not intended in this chapter to discuss the history of Belgian land tenure at any length. A brief review of it, however, must be given in order to show whether it has been subject to the same developments as have occurred in other western European countries, or whether the modern system is the outcome of special and exceptional circumstances.

Whatever may have been the previous conditions, it would seem that by the eighth century Belgium had, in common with other Germanic countries, come under feudal and manorial influences. By the eleventh century, speaking generally, the country, like its neighbours, was divided into seignorial and ecclesiastical domains, tenanted by serfs who, besides cultivating their own holdings, performed more or less onerous services upon the demesne lands of their overlords. These peasant or semi-servile holdings, under the open field system, were held in severalty; but while each holding consisted mainly of scattered and intermixed pieces, here, as elsewhere, there was, after removal of the crops, a common right of pasture over the whole area known as *vaine pâture*. Quite apart from this there were also, in thinly populated districts, large tracts of waste and forest over which the peasants exercised more or less extensive customary rights. It was not owing to any violent changes that the feudal and manorial incidents became modified by the end of the fourteenth century. Gradually the social and political, but still more the commercial influences

resulting from the steadily growing importance of the towns, had freed the peasants from the ties of serfdom and vassalage. This was especially the case in Flanders and Brabant. On the other hand, the district of the Ardennes was particularly backward, and personal servitude, which elsewhere had disappeared in the early stages of the liberating process, lingered on there until the eighteenth century.

In contradistinction to written law, the rights of the lord and tenant were, under feudal jurisprudence, determined by what, from long usage, was known as the "custom" of the country. In Belgium this customary law was eventually written down in the sixteenth and seventeenth centuries, and it gives evidence that the decay of feudalism had long antedated its formal abolition at the time of the French Revolution. The decay was more rapid, however, in some parts of the country than in others.

Throughout the Middle Ages, Flanders and Brabant had been the most advanced states of Belgium; the use of land in common had early disappeared, waste land and forests had become rare, the land was well cultivated, the population dense, and commerce was highly developed in the towns. We read of triennial rotation of crops in Flanders as early as the ninth century,¹ and there are records of farms being let on lease in the twelfth century on conditions very similar to those of to-day.

Namur and Luxembourg, on the other hand, were poor, barren, and largely covered with forests. There was no commerce to give the people such an avenue to power as the great Flemish cities possessed, and thus feudal customs persisted long after they had disappeared in the north of Belgium.

Throughout the country the feudal or "seignorial" ownership of land gradually gave place to what may be called "commercial" ownership. Fiefs were originally granted as compensation for military services to chiefs, who sub-let them to their subordinates in consideration of similar services. As commerce sprang up, the personal

¹ Brant's *Histoire des classes rurales aux Pays-Bas*, p. 206.

obligation to serve in war was soon replaced by money payments, until at length it became possible for fiefs to be held by women, children, and others equally unfitted for military duties. Thus, although they remained subject to special laws, they practically came to assume the character of free and hereditary property.

Even in Luxembourg, where the change took place slowly, it seems to have been accomplished long before the seventeenth century, when the legal records state that "by custom, fiefs have become reduced to the nature of patrimonial properties, and the vassals may sell, alienate, engage or mortgage or otherwise dispose of them according to will, without leave or permission of the feudal lord, but always subject to the lord's rights"—the transfer being registered in the feudal court and the feudal charges paid.¹

Side by side with the freeing of land held in fief under feudal tenure by landlords, was the progress towards freedom which was altering the relation between landlord and tenant. Manorial dues incident to the earlier serfdom suffered a gradual diminution until they grew insignificant, and the originally servile tenure became virtually a freehold. It not infrequently happened that through enfranchisement, purchase, or some less legal course, manorial holdings ceased to make any payment to the over-lord. As a result of one or more of these various tendencies, the end of the eighteenth century saw many of the once manorial holdings treated practically as freehold, and either purchased from previous holders at the price of freehold land, or else occupied as such.

At this time, the amount of freehold land in the country was probably greater than is generally supposed, and, as tenants took advantage of prosperous times to buy their holdings, just as they do now, small peasant properties were not unknown.

It would be a mistake to think that feudal estates were always large. On the contrary, they were sometimes quite

¹ E. Defacqz, *Ancien Droit Belgique*, vol. ii. p. 65.

small. Their size differed from province to province, just as did that of other properties. Landowners did not necessarily cultivate the whole of their land themselves or through their stewards, although as a rule they kept some portion in demesne under their own control. But as time went on, more and more of this was let to tenant farmers of the modern type, so that a class of commercial tenants paying rent and holding under contracts arose side by side with the holdings once under feudal tenure.

The first step towards tenant farming as now understood was *métayage*. Under this system, a tenant, on taking a farm, sometimes received from the landlord a considerable part of the capital required for its cultivation, on the understanding that the produce was to be divided between landlord and tenant, in proportions depending on the amount of capital provided by each.

For a long time there existed also a system known as *cheptel*, half way between modern tenant farming (*fermage*) and *métayage*. Under this the proprietor let with the farm a certain amount of stock, the equivalent value of which had to be handed back when the farm was given up by the tenant, and for the use of which an annual payment was made. By the end of the eighteenth century *cheptel* had quite disappeared, and although *métayage* still exists to a small extent, it was *fermage* which eventually became the prevalent form of tenure.

It would be difficult to fix the exact date when farms were first let on the modern basis of landlord and tenant. Doubtless, the system began at a remote period, but, as we have seen, it did not extend rapidly. Examples of leases (*baux à ferme*) are known to have existed as early as the thirteenth century in Flanders. Their length varied according to local custom, but they were usually for three, or a multiple of three years. Three was the length of the rotation, nine that of the heavy manuring (*grandes fumures*), twelve the term of the marling (*marne*) on such lands as required it.

When a tenant cultivated land after the expiration of

his lease, there was a tacit understanding that he could continue to do so during the term of rotation. Leases of three, six, nine, twelve, and eighteen years were known, but the longer ones were rare. In spite of the extension of the area of land let for short terms, emphyteutic tenures (*baux emphythéotiques*)¹ existed to a large extent in the eighteenth century, especially in the case of ecclesiastical property, and were much valued by the peasants.

Legal and political causes have not, in Belgium, as in some other countries, played an important part in determining the proportion of land cultivated respectively by owners and tenants.

Whatever may have occurred elsewhere, apart from exceptional instances, wholesale confiscations of peasant rights do not seem to have occurred in Belgium. In Flanders and Brabant it would have been impossible because at the time of the French Revolution feudalism had virtually disappeared.

If we now sum up the conditions of land tenure at the end of the eighteenth century we find that ownership in Belgium fell under the following headings:—

1. Ecclesiastical properties covering a considerable portion of the country, and mostly let on lease, in farms whose size differed according to the natural conditions, just as they do to-day. In the sandy region they were small, in the clayey and sandy-clay regions they were often larger, sometimes several hundred acres. Often the ecclesiastical communities continued to cultivate directly one or several farms in the immediate neighbourhood of their chief seat.

2. Properties owned by the nobles or great landlords. These were often their hereditary feudal possessions. Most of their ancient demesne land was let to tenants, while the owners reserved farms near their castles, which were worked with the help of bailiffs. Many nobles, especially the lesser aristocracy, spent a considerable part of their time, sometimes the whole year, in the country, a custom which still

¹ *I.e.* leases of a length varying from twenty-seven to ninety-nine years and giving the tenant the right to erect buildings at his own expense.

persists, though not as extensively perhaps as it did before the middle of the nineteenth century.

3. Land purchased as an investment, mostly let to tenant farmers. The opportunities for investment were much fewer at that time than now, and moreover there was still something of the old objection, long felt by the Church, to the taking of interest. Hence land was looked upon by the trading classes as the most desirable investment for capital—especially as its possession carried with it a certain social prestige.

4. Land belonging to peasant proprietors. These were either the successors of original holders of ancient feudal tenements or else persons (or descendants of persons), who had become owners of land by purchase.

There are unfortunately no figures to show in what proportion the above classes occupied the land in the eighteenth century, but it undoubtedly differed from district to district.

THE CHANGES BROUGHT ABOUT THROUGH THE FRENCH REVOLUTION

In 1795 Belgium was annexed by France, and brought under the laws of the Republic. These formally abolished the feudal system, and put an end to all payments made to land-owners except ordinary rent. The tithe was suppressed, and in spite of efforts subsequently made by the clergy, was never re-established. Many of the properties belonging to the nobles were confiscated, and some sold, but the majority were restored to their owners by Napoleon.

The suppression of the religious orders, and the nationalisation of their property by the State, modified the agrarian system in Belgium more than any other revolutionary measure. The religious orders were numerous and rich, and possessed of immense landed properties, accumulated during ten centuries of offerings from the devout. In Brabant, according to Vandervelde, probably one-third of the land belonged to the Church. The Church lands were

not all sold as a result of the Revolution ; but considerable portions were, although among a Catholic and religious population it was difficult to find purchasers for *biens noirs*, and many thus remained in the hands of the clerics.

The question arises, "Did the sale of seignorial and Church lands at the time of the Revolution at all increase the number of peasant proprietors?" Up to a certain point this was the case, for some were bought by tenant farmers and some by speculators, including a number of foreigners, who divided them up and sought to re-sell them. But much of the land was bought by townsmen who held it as an investment, letting it to tenants. On the whole it cannot be said that the sale of these lands materially increased the amount of cultivating ownership or created a class of peasant proprietors. It rather appears to have increased the number of large proprietors and tenant farmers of the modern type. This view is supported by the fact that writers like Young, Derival, and Shaw, writing about this time, make no reference to any great change in the conditions of land tenure in Belgium. They all speak of peasant proprietors, large proprietors cultivating their own land, and tenant farmers as living side by side with no tendency on the part of one class to supplant the others. Had there been any striking development in this direction following the annexation of Belgium by France in 1795, it is not likely that it would have escaped mention by contemporary writers.

The above inference is supported by the positive evidence of the writer Schwerz,¹ whose picture of agrarian conditions in Belgium in the first decade of the nineteenth century has all the vividness of intimate knowledge, such as he was able to obtain in his twenty years of farm stewardship there. His description was scarcely out of date at a comparatively recent time.

In Belgium, peasant ownership was not the sudden Revolution-made system it is so often said to have been.

¹ *Anleitung zur Kenntnis der belgischen Landwirtschaft* (Halle, 1807-1811).

It existed before and persisted after the Revolution era. There were, however, in the first half of the nineteenth century two movements which had an important bearing on the welfare of the agricultural population. Between 1815 and 1850 much State forest land was sold, and after the terrible famines of 1846 and 1847 a law was passed permitting the sale of common lands. Both measures were taken because it was considered a wise policy to force more and more land into cultivation, so that the small yield of bad seasons might be made good by the cultivation of as large an area as possible. The vast supply of wheat from the virgin soil of America had not yet become available, and a bad local harvest meant famine to the poor. The sale of forest land to private owners was made subject to the condition that it had either to be brought under the plough or to be reforested within a certain time. As for the common lands, it was believed that by selling them to private owners the inefficient cultivation to which common ownership tended, would be replaced by the energetic work that springs from the hope of individual gain.

These two movements will receive due consideration when we come to discuss Woods and Forests and Common Lands. In the next chapter we shall deal with the question of ownership.

CHAPTER IV

THE NUMBER OF LANDOWNERS IN BELGIUM CLASSIFIED ACCORDING TO THE SIZE OF THEIR HOLDINGS

ALTHOUGH economists differ in many of their views on the land question, all are agreed that the social well-being of a country is fundamentally affected by the conditions upon which land is held. This is inevitable, since of the three factors in the production of all wealth, land, labour (including management and organising ability), and capital, only the first is limited in amount. Its extent cannot be appreciably increased by human effort, and yet without it human existence is impossible. The owners of land can, therefore, in a great measure, dictate their own terms to those who own none, and in a social and economic survey of a nation it is essential to know in how many hands this great power is vested. In countries like Belgium, where the population is advancing and industry is developing rapidly, land values tend over a term of years to rise. It is not disputed that this increase in the value of the land is primarily due to the activities of the workers, but whom does it benefit? Does it pass to a small wealthy class, to be spent mainly in luxuries, or is it widely distributed among the population, and if so, how widely? But the question of how land is distributed is of importance from other points of view. Its ownership carries with it great power, not only over the purse but the person of the landless worker. Experience shows that big landowners would generally rather let their land to a few large farmers than to many small cultivators, and are no more disposed to sell small plots than to let

them, and hence many a thrifty and enterprising workman who seeks to rise to a position of independence finds himself in an impasse. Born a labourer, the chances are that he must remain one all his life, unless he seeks occupation in the towns. If, however, the number of landowners in a country is large and the amount owned by each proportionately small, properties suitable to his requirements frequently come into the market, and it is not difficult for him to become a small proprietor or the tenant of a little holding. In either capacity he may work as hard, or even harder, than he has done before, but it is work cheered by hope, carrying with it a sense of security and independence to which he was formerly a stranger. Thus we see how vitally the careers of multitudes are affected by the system of land tenure prevailing in a country.

There is another important matter to be considered in this connection, namely, the extent to which independence of thought and action is possible among the population. It was recently said in the British House of Lords: "Surely, what gives reality to ownership, what makes it a valuable and precious thing to many people, is that we have hitherto associated with it the power of guiding the destinies of the estate, of superintending its development and improvement, and, above all things, the right to select the persons to be associated with the proprietor in the cultivation of the soil."¹

While making full allowance for the liberality of outlook which many large landowners show in the management of their estates and in their relations with their tenants, it is a matter of common knowledge that the lot of a man who, either in politics or religion, actively opposes his landlord is often a most unenviable one. It may be argued that if he is oppressed he can find another landlord, but the political and social interests of large landowners are generally so similar that it is doubtful whether he would better his position by making a change. Moreover, it is easy to over-

¹ Lord Lansdowne, speaking in the House of Lords on the Scottish Landholders Bill on August 14, 1907.

estimate the mobility of labour in a civilised country. The attachment of the workers to a given locality is often exceedingly strong. They may have taken up religious or political work in which they are keenly interested, or made friends whom they are loth to leave; their children may hold good positions in local factories or places of business, and in countless ways their roots may have struck deep into the social life of the neighbourhood. Such men will submit to a great deal rather than move to a different part of the country, and hence it is possible for any one who owns all the land for miles round to dictate very onerous conditions to his tenants, and still not drive them away.

But if the number of proprietors in a country be large, oppression of this kind becomes less possible. In the first place it is easier for men to escape from it by exchanging tenancy for ownership, and even if they cannot do this, a small landowner has much less power over his tenants than a large one. If the two do not agree, the tenant has the choice of many landlords in his immediate vicinity, among whom—as they do not belong to a wealthy class far removed from his own—he is almost certain to find some with whose interests he is in full sympathy. There are other reasons why it is important to know how the land in a country is owned, but they are of less weight than those already named, and need not, perhaps, be referred to here.

Belgium is always spoken of as a country of small proprietors; but an examination of the available data showed that none had been published from which it would be possible to make even a rough estimate of the number of landowners in the country. An up-to-date record is kept of the landowners in each of the 2627 communes, and their number is sent annually to the central government. The numbers from all the communes are added together, and the total published by the Belgian Government in their annual statistics; in 1907 it was 1,302,737. This figure is sometimes quoted as being the number of separate proprietors, but this is very far from being the case. Some Belgians own land in twenty, thirty, forty, and even one hundred

and more different communes.¹ In these annual statistics the land belonging to a man holding, say, one acre of land in each of twenty different communes would be returned in the same way as if held by twenty different men having an acre each.²

In view of the importance of the question from the economic standpoint, the writer felt it to be essential to gather information which would enable him to state, with a fair degree of accuracy, the total number of landed proprietors in Belgium, and to classify them according to the size of their holdings. This work proved to be not only very heavy, but extraordinarily difficult and complex. It occupied nineteen months, during which time nearly five hundred different persons were engaged upon it for longer or shorter periods. Of these, 383 were officials of the Belgian Government and 101 private clerks employed by the writer. Some idea of the magnitude of the undertaking may be gained from the fact that more than three hundred thousand record cards, weighing over one and a half tons, were employed in the compilation of these statistics.³

The chief source of information was the land register referred to above, which is kept for every commune. Besides showing the amount of land owned within the commune by every proprietor, it specifies its character, whether, for instance, it is pasture, arable, market garden, or building land. It also states where the owner lives. In addition to the register, there is a map of every commune, showing each parcel of land and all buildings. The maps and registers are kept up to date, and thus afford very complete information for the separate communes; but, as already stated, one man may own property in many communes, and

¹ See p. 45.

² Between 1845 and 1907, although, owing to the growth of the population, the number of these properties (technically known as *Articles des rôles fonciers*) fell from 23 to 18 per 100 inhabitants, their total number rose from 914,937 to 1,302,737. It must not, however, be assumed that the actual number of proprietors rose in the same degree. We have no statistics on the subject, but it is probable that the rate of increase in their numbers has been less than in that of the number of *articles*.

³ It is fully described in the Appendix, p. 551 *et seq.*

in such a case to ascertain his total holding is a very complicated process. It is so complicated that it is not proposed to describe it here;¹ suffice it to say that to ascertain the total amount of property which a man owns often involved correspondence with as many as forty or fifty officials in different parts of the country, and, after information had been received from them, a search in from fifty to one hundred volumes contained in nine different offices, situated in nine different towns. To undertake such a work as this for the whole of the country was obviously beyond the possibility of private enterprise, but through the great courtesy of the Belgian Government, and the help kindly given by a large number of Government officials, the writer has obtained full information regarding the ownership of more than half the land in Belgium, and, in addition, information regarding the remainder, sufficient to enable him to form what he believes to be a trustworthy estimate of the total number of landowners, classified according to the amount of land possessed by each.

The first step in the investigation was to go to the principal land registry office in each province. In these nine central provincial offices, exact copies are kept of all the communal land maps and land registers. These were carefully examined, and it was found that no reliable estimate of the number of landowners could be formed without full statistics of all the large holdings. It was, therefore, determined to go through every land register in Belgium, and to note down all cases in which persons were returned as owning 62 acres (25 hectares) or more in one block in any one commune. Steps were then taken to ascertain how much land these persons possessed in other parts of the country. In this way, complete and accurate information has been procured regarding the holdings of 9984 proprietors, owning among them 52 per cent of the land of Belgium.

As it was impossible to obtain full information for the whole of the remaining area with its enormous number of

¹ It is fully described in the Appendix, p. 551 *et seq.*

small proprietors, it was decided thoroughly to investigate a small number of communes, and assuming the conditions in these to be typical, to arrive at the total number of proprietors in the uninvestigated part of the country by a proportion sum. Two methods of selecting communes were available—one, to take them at random and trust to the law of chance that they would be typical; the other, to examine the land registers of all the 2627 communes, and to select for detailed examination a number which seemed to be typical of the whole.

The latter was the method adopted. The land registers showed that the communes could be grouped according to the average size of properties, as follows:—

328 communes in which the average size of holding was under $2\frac{1}{2}$ acres.				
433	„	„	„	varied from $2\frac{1}{2}$ to $3\frac{3}{4}$ acres.
415	„	„	„	„ $3\frac{3}{4}$ „ 5 „
461	„	„	„	„ 5 „ $7\frac{1}{2}$ „
377	„	„	„	„ $7\frac{1}{2}$ „ 10 „
274	„	„	„	„ 10 „ $17\frac{1}{2}$ „
134	„	„	„	„ was over $17\frac{1}{2}$ acres.

Basing the selection upon this preliminary examination of the land register, a number of communes were chosen for detailed examination, which, however, was not commenced until the names of the communes to be selected had been very carefully discussed with the officials in the land registration offices, who were especially qualified to say whether they really were typical. Eventually twenty-eight communes were fixed upon, care being taken to maintain the same proportion between the different groups as was found to obtain in the country generally. Permission to make this enquiry was granted to the writer by the Belgian Government on the understanding that he should disclose no facts which could lead to the identification of private individuals or make their affairs public property. For this reason he has refrained from publishing various items of information that might have been of interest; nor can he give the names of the communes selected. It may, however, be stated that they were all rural ones. At first sight it might be conjectured that these would not be

typical of the whole of Belgium, including the towns. But such a doubt would be groundless, as the land registers of all the urban communes were inspected along with the rural ones, and each commune was placed in one of the groups referred to above, according to the average size of its holdings. Then, as already stated, those which were most typical of the whole were selected from each group. That none of them happened to be urban does not in the least affect the results of the investigation, which is concerned with the number of the owners and the size of their holdings, not the character of the holdings or the relative density of the population upon them. The land in the twenty-eight selected communes was owned by 13,316 different proprietors, about 5000 of whom also owned land in other parts of the country. Altogether they owned 126,157 acres, of which 45,950 were in the twenty-eight communes, and the remainder outside.¹

It may at first sight appear unsafe to estimate the conditions of landholding in 3,097,963 acres from an examination of 126,157. Certainly, if the disturbing element of the large landowners had not been first removed, no accurate result could have been obtained; but as this was done, and great care was taken to secure a representative sample for investigation, the writer believes that the results obtained accord substantially with the actual facts. That the figures are mathematically exact is, of course, not suggested, but it is unlikely that the inaccuracies are such as vitally to affect any conclusions to be drawn from an examination of them. Taking the large landowners and the twenty-eight communes together, accurate and complete information has thus been obtained regarding 55 per cent of the land of Belgium.

Having described in brief outline the methods of the enquiry, we are in a position to examine its results. The writer believes that with the exception of certain English

¹ These figures do not include any landowners in the twenty-eight communes who owned as much as 62 acres in one block in one commune, as these had already been counted in the large landowners enquiry.

returns which are now quite out of date, there is no such information available for any other country in Europe.¹

The table on p. 43 gives the figures for the country as a whole, and shows that on the basis of the investigation made, *the total number of proprietors in Belgium is 719,986.*² This is equal to 10 per cent of the total population, and to 18 per cent of the population over twenty-one years of age.

Of the total number of proprietors,

17	per cent own	less than $\frac{1}{8}$ th	of an acre each.
35	"	"	from $\frac{1}{8}$ th to 1 acre each.
27	"	"	" 1 to 5 acres each.
16	"	"	" 5 " 25 "
$2\frac{1}{2}$	"	"	" 25 " 50 "
$2\frac{1}{2}$	"	"	more than 50 "

Thus we see that three-quarters of the landowners in Belgium have less than 5 acres each, and 95 per cent have less than 25 acres. Only 146 men have more than 2500 acres each. On the average, each proprietor in Belgium owns 9.5 acres.³ Or the matter may be put in another way, and it may be said that

¹ The approximate number of proprietors in Italy is ascertained when the census is taken, but no particulars are obtained of land belonging to persons who are absent from the country at the time, nor of that belonging to public institutions of any kind; nor is any information gathered about the amount of land owned by each proprietor. Somewhat similar information is published in connection with the Swedish census.

² All the land in Belgium is included, except the following:—

- (1) Land owned by the State.
- (2) That portion of the land owned by Provincial and Communal authorities, which is not taxed because it is used for public purposes, such, for instance, as schools, town halls, etc.
- (3) Roads, railways, rivers, and canals.
- (4) Land upon which churches have been built.

In the Appendix, pp. 557-8, will be found two other tables. The first refers to all landowners who own more than 61.77 acres in one block in any one commune; the second, on p. 558, refers to the twenty-eight communes selected for special and complete investigation.

³ In Italy, according to the census returns referred to in the above footnote, the proportion of the population who are landowners is actually greater than in Belgium (12.7 compared with 10.1 per cent); but the average area owned per proprietor in Italy is nearly twice as great as in Belgium (17 acres as compared with 10), the explanation being, of course, that the population is so much denser in Belgium.

THE NUMBER OF PROPRIETORS¹

Size of Property (Acres).	Number of Proprietors. ³	Percentage of Total Number.	Area owned (Acres).	Percentage of Total Area.	Size of Property (Acres).	Number of Proprietors. ²	Percentage of Total Number.	Area owned (Acres).	Percentage of Total Area.
Under 0.12	118,500	16.6	7,040	0.1	49.42 to 51.90	000	0.09	30,628	0.44
0.12 to 0.24	79,800	11.1	14,203	0.21	51.80 " 54.38	1,554	0.1	40,014	0.58
0.24 " 0.37	50,800	6.9	16,030	0.23	54.36 " 56.83	750	0.1	41,743	0.61
0.37 " 0.49	34,800	4.9	15,017	0.22	56.83 " 59.30	900	0.13	52,858	0.77
0.49 " 0.61	28,700	3.9	16,129	0.23	59.30 " 61.77	800	0.12	48,412	0.70
0.61 " 0.74	22,800	3.2	15,388	0.22	61.77 " 74.13	1,553	0.2	109,174	1.58
0.74 " 0.86	19,900	2.8	16,005	0.23	74.13 " 86.48	1,814	0.2	149,682	2.19
0.86 " 0.98	18,000	2.6	16,998	0.25	86.48 " 98.84	1,473	0.2	140,543	2.03
Under 1 acre	372,300	52.0	116,805	1.69	50 to 100	8,640	1.14	613,064	8.90
0.98 to 1.11	15,000	2.1	15,857	0.23	98.9 to 123.5	2,294	0.2	182,286	2.62
1.11 " 1.23	13,200	1.9	15,338	0.22	123.5 " 157.3	1,177	0.3	860,620	5.23
1.23 " 1.35	18,900	2.6	18,105	0.26	157.3 " 237.1	1,309	0.2	269,350	3.76
1.35 " 1.60	23,500	3.3	38,532	0.55	237.1 " 370.7	609	0.2	387,670	5.76
1.60 " 1.85	16,600	2.3	28,899	0.42	370.7 " 494.2	701	0.09	261,820	3.79
1.85 " 2.47	39,600	5.5	90,898	1.32	494.2 " 741.3	392	0.09	422,370	6.12
2.47 " 4.94	73,400	10.2	273,500	3.98	741.3 " 988.4	806	0.06	331,980	4.80
1 to 5	195,200	27.3	481,127	6.99	100 to 1000	8,036	1.14	2,216,096	32.08
4.94 to 7.41	39,700	5.6	259,350	3.76	988 to 1236	207	0.03	225,264	3.26
7.41 " 9.88	24,300	3.4	211,926	3.03	1236 " 1853	252	0.04	380,260	5.66
9.88 " 12.85	15,700	2.2	185,008	2.69	1853 " 2471	105	0.02	219,830	3.19
12.85 " 14.82	11,100	1.6	137,586	1.99	2471 " 3707	81	0.02	242,307	3.50
14.82 " 17.29	7,400	1.0	123,500	1.80	3707 " 4942	38	0.005	157,833	2.29
17.29 " 19.76	7,400	1.0	122,265	1.78	4942 " 988.4	683	0.005	1,235,494	17.90
19.76 " 22.33	5,200	0.7	113,373	1.65	1000 to 5000	14	0.003	86,203	1.26
22.33 " 24.71	4,300	0.5	104,975	1.53	4942 to 6178	2	0.0003	13,733	0.20
5 to 25	114,200	15.9	1,277,978	18.58	6178 " 7413	2	0.0003	30,628	0.44
24.71 to 27.18	3,100	0.4	83,738	1.22	7413 " 8649	4	0.0005	28,158	0.41
27.18 " 29.65	2,100	0.3	91,143	1.32	8649 " 9885	2	0.0003	23,427	0.33
29.65 " 32.12	2,600	0.3	82,004	1.19	Over 12,356	2	0.0003	29,640	0.43
32.12 " 34.59	2,500	0.3	85,462	1.24	Over 5000	27	0.006	210,789	3.07
34.59 " 37.06	2,100	0.3	76,570	1.11	GRAND TOTAL	719,986	100.0000	6,895,060	100.00
37.06 " 39.53	1,600	0.2	62,491	0.91					
39.53 " 42.00	2,200	0.3	91,884	1.33					
42.00 " 44.47	1,400	0.2	61,508	0.89					
44.47 " 46.95	1,100	0.1	51,129	0.74					
46.95 " 49.42	1,200	0.1	57,798	0.84					
25 to 50	20,900	2.4	743,717	10.79					

¹ As the whole enquiry was necessarily conducted in *hectares*, which have here been reduced to *acres* (one hectare equalling 2.471 acres), the first column of the above table is somewhat involved. The precise acreage has been set down for the benefit of the statistician; but the general reader will find beneath each group a summary in round numbers which is printed in heavy type.

² The numbers of proprietors of holdings not exceeding 61.77 acres are based on the twenty-eight communes enquiry, and are given in round figures; but the numbers of larger proprietors, being based almost entirely upon the special enquiry which covered all owners in Belgium who had as much as 61.77 acres in one block and in one commune, it is possible to give in precise figures.

1 $\frac{3}{4}$ per cent of the land is owned by men each having less than 1 acre.					
7	”	”	”	”	from 1 to 5 acres.
18 $\frac{1}{2}$	”	”	”	”	5 ” 25 ”
10 $\frac{3}{4}$	”	”	”	”	25 ” 50 ”
9	”	”	”	”	50 ” 100 ”
32	”	”	”	”	100 ” 1000 ”
18	”	”	”	”	1000 ” 5000 ”
3	”	”	”	”	more than 5000 acres.

Thus over a quarter of the land is owned by men each of whom has less than 25 acres, and nearly one-half by men each of whom has less than 100 acres. These figures refer to the total holdings of the respective proprietors, but since properties, even the small ones, are often much subdivided, they do not give an adequate picture of the distribution of the land. In order that we may better understand this, let us take a single commune, situated in a rural district where subdivision has been carried far, and see how the land in it is distributed. In an area of 1739 acres there are 801 proprietors, owning on an average 2.16 acres each.

483 of the proprietors own less than 1 acre.					
157	”	”	”	”	from 1 to 2 $\frac{1}{2}$ acres.
139	”	”	”	”	2 $\frac{1}{2}$ ” 12 $\frac{1}{2}$ ”
9	”	”	”	”	12 $\frac{1}{2}$ ” 25 ”
8	”	”	”	”	25 ” 62 ”
1	”	”	”	”	owns between 62 and 125 ”
None own more than					125 ”

These figures take no account of any land held by these proprietors outside the commune, but it is certain that their holdings inside it consist in many cases not of one block, but of a number of separate parcels.

From some points of view the power which a landowner can exercise depends upon his having not only a large but an undivided estate. In Belgium, however, it is quite exceptional, save in the districts where the land is of small value and mostly covered with forests, for large landowners to own undivided estates, as do many of the British proprietors. Their land, as a rule, consists of a number of small properties often at a considerable distance from one another. The large landowners enquiry showed that only a fifth of them hold land in a single commune, rather over

three-fifths hold land in from two to ten communes, and nearly one-fifth in a yet larger number, varying from ten to over a hundred. The detailed figures, including those of the twenty-eight communes enquiry, are as follows:—

Number of Communes in which Property is owned.	28 Communes Enquiry. Number of Proprietors.	25 Hectares (62 Acres) Enquiry. Number of Proprietors.
In 1 commune . . .	7964	1985
„ 2 communes . . .	2577	1490
„ 3 „ . . .	1266	1130
„ 4 „ . . .	496	960
„ 5 „ . . .	316	783
„ 6 „ . . .	193	} 1866
„ 7 „ . . .	112	
„ 8 „ . . .	76	
„ 9 „ . . .	66	
„ 10 „ . . .	40	
„ 10 to 15 communes	122	832
„ 15 „ 20 „	44	447
„ 20 „ 25 „	21	206
„ 25 „ 30 „	12	125
„ 30 „ 35 „	5	} 93
„ 35 „ 40 „	2	
„ 40 „ 50 „	4	
„ 50 „ 60 „	...	17
„ 60 „ 80 „	...	7
„ 80 „ 100 „	...	3
Over 100 „	...	7
Total . . .	13,316	9984

In the British sense of the word it may be said that there are really no large landowners in Belgium, for the two largest only possess 30,000 acres between them. How striking is the contrast in this respect between Belgium and the United Kingdom, where there are hundreds of persons owning more than 20,000 acres each, and where there are several landlords each holding over 200,000, and one holding as much as 1,300,000 acres, and where twenty-six Peers

own as much as the whole cultivated and wooded territory of Belgium together.¹

When examining in detail the conditions of ownership in connection with the twenty-eight communes enquiry,² distinction was made between those proprietors who had

- (a) Land covered with buildings.
- (b) Land with no buildings upon it.
- (c) Land with some buildings upon it.

Some interesting figures were obtained. Of the 13,316 proprietors whose holdings were investigated, 875, or $6\frac{1}{2}$ per cent, own nothing but a house with possibly a small garden attached, and of these only ten own more than a quarter of an acre of land. It is not surprising to find so great a number of small house owners when we remember how far-reaching has been the effect of legislation which facilitates the purchase by working men of their houses. On the other hand, 3162 proprietors (24 per cent of the whole) own land having no buildings upon it. Presumably this consists chiefly of plots of agricultural land, and it is interesting to notice that no less than 2094 of these are $2\frac{1}{2}$ acres or less in extent. No doubt many of the proprietors are peasants who are gradually acquiring the land they cultivate, and possibly there may also be some agricultural labourers who are investing their savings in land, with the intention of eventually setting up for themselves as small cultivators.³

¹ The last complete statement showing the number of proprietors in Britain, classified according to the amount owned by each, refers to the year 1873. It is impossible to estimate the number of landowners at the present time. The holdings of a few of the largest only are known. In 1873 the average amount of land owned per proprietor was 35.5 acres, or nearly four times as much as in Belgium at the present time.

² Including land held *outside* the twenty-eight communes by landowners within them.

³ In considering the relative extent of land built upon and land not built upon in the twenty-eight communes enquiry it must be remembered that we are dealing with rural districts. As already pointed out, this fact does not affect our general conclusions with regard to the total number of proprietors in the country and the size of their holdings, but it affects the proportion of the land which is built upon. Had urban communes been selected for investigation, this would, of course, have been much larger. For

Another point brought out by the enquiry is the large proportion of the land which is held jointly by two or more owners, amounting to one-tenth of the area investigated, and therefore presumably to one-tenth of the whole country.¹ This is principally due to the Succession Laws which oblige a landowner to divide his property equally among his heirs with the exception of one share, which, though legally at his disposal, in practice is almost invariably divided with the rest. Very often, instead of farming the land separately, the heirs hold it in partnership; in some cases they all remain upon it, while in others they agree for one of them to farm the whole, paying rent to the rest for the use of their portions. But for this custom, the subdivision of property might soon become excessive and unprofitable.

Another point to be noted is the large number of cases in which land is held on emphyteutic leases.² Altogether, 5056 such cases were found in the investigated area, and so it is probable that not less than twenty-one thousand long leases are in existence in the whole country, only one-fifth of which refer to building land, the rest being for agricultural land. The area of agricultural land thus held is not known, but as almost all the leases are for small holdings up to about 25 acres in extent, it may be assumed that their average size is about $12\frac{1}{2}$ acres. This would give this reason, no attempt is made to distinguish between land built upon and not built upon, in the table which gives the number of proprietors for the whole country.

¹ It was found in the twenty-eight communes enquiry that land was held in partnership in 4876 cases, the total number of partners being 12,454, and the area of the land so held 21,307 acres.

The 25 hectares enquiry showed 7816 cases where land was held in partnership, the total number of partners being 16,808, and the total area of the land so owned 327,558 acres. But this does not mean that almost all the proprietors investigated held the whole or some of their land in partnership with other people; this is far from being the case. The explanation of the high figures is that one person is often counted several times, because he holds different plots of land in conjunction with different partners.

² In Belgium an emphyteutic lease (*emphytéose*) is one for a period varying from twenty-seven to ninety-nine years. On the expiration of the lease all buildings upon the land, no matter by whom erected, pass into the possession of the landlord.

us 266,266 acres, or 3·82 per cent of the total area of agricultural land held on emphyteutic lease.

The investigation has also supplied some useful information regarding the total area of common land owned by the communes. Since the year 1864 the available statistics have only shown the area of forest and waste land under communal ownership, no data being forthcoming regarding the cultivated land which was communally owned. In the course of the present enquiry it was found that among the 9984 landowners each possessing at least 62 acres in one block in any one commune, the communes themselves figure to the number of 999, owning among them 582,502 acres. As very few communes would be likely to own less than 62 acres,¹ it may be assumed that the above figure represents almost the whole of the communally owned land. If, then, we subtract from this total the known area of forest and uncultivated land, we shall find that about 52,000 acres, or 0·78 per cent, of the cultivated land of Belgium is owned by the communes.

The facts regarding the land held by public bodies are also to be noted. Among the landowners investigated there are eighty-eight *Bureaux de Bienfaisance*, owning altogether 48,760 acres, and 101 *Hospices*,² owning 78,383 acres. Some of the *Hospices*, especially, own large tracts of land; one, for instance, 11,473, and another 7405 acres. But complete figures of their holdings and of those of the *Bureaux de Bienfaisance* cannot be given, for it cannot be assumed that the twenty-eight communes were typical of the uninvestigated part of the country in this respect.

Complete information regarding the amount of land owned by religious orders and the Church is not furnished by the investigation, as almost all of it is registered under the names of private individuals, without any indication that it is held on behalf of a public body. Thus the fact

¹ In the 126,157 acres investigated, nineteen such cases were found, and the total of their holdings only amounted to 153 acres.

² The *Bureaux de Bienfaisance* and the *Hospices* are bodies responsible for the administration of the great bulk of the official poor relief in Belgium. See Chapter XXX.

that, in the course of the twenty-eight communes enquiry, eighty-three *Fabriques de l'Église* appeared as owning 2789 acres, while among the large proprietors were eighty-seven *Fabriques de l'Église* owning 11,211 acres, does not really signify very much. Such figures represent only a comparatively small proportion of the total holdings of these bodies, even in the areas investigated, and it must be further remembered that the *Fabriques de l'Église* are not at all concerned with property held by or for convents.

There is one matter to which reference should be made before concluding this chapter, viz. the way in which the subdivision of land affects its price. We have seen to what an extraordinary extent the land of Belgium is divided up, and how, through this, not only are wider careers possible for multitudes of men who, in a country of large landowners, would almost certainly remain mere labourers, but the small man develops much greater independence of thought and character. But reference has not been made to the fact that in countries where land is much subdivided, its rent and price are usually higher than elsewhere. The cause of this is two-fold. First, the number of competitors for small pieces of land is much greater than for large, and secondly, small plots are much more intensively cultivated than large farms, and cultivated, moreover, by the holders and their families, without paid labour. The margin available for rent would be considerably narrowed if a wage-bill had to be met weekly.

It will be shown in the succeeding chapters that in Belgium, as in other countries where there are many peasant holders, the rent and price of land are so high that only very arduous toil enables the cultivator to make a living. Certainly, he would not exchange with the British agricultural labourer; nevertheless, Belgian experience shows that though there are many advantages in the wide distribution of the ownership of land, in the ultimate solution of the land problem many other factors must be taken into consideration.

MORTGAGES

In comparing the relative advantages of ownership and tenancy, the extent of the mortgage burden must not be forgotten. It is sometimes asserted that land owned by a large number of small proprietors is almost invariably heavily mortgaged, and it is essential to form some idea of the extent to which such criticism is justified in Belgium. Various estimates have been put forward of the mortgage debt upon her agricultural land, but close scrutiny shows that they are all built up on inadequate foundations—are, in fact, little more than intelligent guesses. To gain more exact knowledge, the writer was obliged to make a special investigation. This could not be made on a large scale, for there is no central office where information about mortgages can be gathered; it must be sought in the regional land registry offices, and in these it can only be obtained on payment of a fee for each item of information. The present investigation was, therefore, confined to 2550 properties distributed over various parts of the country, but care was taken to make the small sample dealt with as representative as possible of the whole. For instance, a certain number of the properties were in East Flanders, where land is much subdivided; others in the Ardennes, where estates are comparatively large; others in the Hainaut, near a dense centre of industry, and so forth.

When, however, the number of properties to be investigated in each locality was fixed, they were selected without any knowledge as to whether or not they were mortgaged. The number of cases investigated is too small to justify any generalisation as to the total mortgage debt on agricultural land in Belgium; but, on the other hand, it is sufficient to give a trustworthy indication of whether it is or is not true that the great bulk of small owners have mortgaged their land up to the hilt.

When the investigation was completed it was found that a number of small properties consisted, not of agricultural holdings, but of houses. Before making any

calculations all such cases were put aside, and the calculations are therefore based not on 2550, but on 2251 properties, which consist either of land without buildings or of properties in which the value of the buildings is secondary to that of the land.

The results of the enquiry are given in the table on page 53, and the first fact that emerges from an examination of the figures is that 31 per cent of the owners have the whole or some part of their land mortgaged.¹

It will be noted that of the very small owners, namely, those with less than a third of an acre of land, only $7\frac{1}{2}$ per cent have mortgages. The proportion of mortgaged proprietors rises with more or less steadiness until we reach those with from 37 to 62 acres, where it is 40 per cent. Then it drops again until we reach proprietors with from 247 to 370 acres, after which it apparently rises; but so few large proprietors came within the area of investigation that the percentage figures relating to them cannot be regarded as trustworthy. Taken as a whole, however, these figures show distinctly that the largest proportion of mortgages is to be found among proprietors who own from $7\frac{1}{2}$ to $86\frac{1}{2}$ acres, and with them the amounts vary from an average of £9:12:5 per acre on farms from 37 to 62 acres each, to £21:10:7 on those with from $7\frac{1}{2}$ to $12\frac{1}{3}$ acres. As the average price of agricultural land in Belgium exclusive of buildings is probably about £60 an acre, it will be seen that even in the case of the mortgaged farms the proportion which the mortgage bears to the total value

¹ In Belgium no mortgage holds good for more than thirty years, at the end of which time a new one must be taken out, if the loan is to be continued. When a mortgage is taken out it must be registered by an official called the *Conservateur des hypothèques*, and this registration must be repeated at the end of the first fifteen years, or else the mortgage lapses automatically. As it costs money to cancel a mortgage when a loan is repaid, the parties not infrequently agree to let the registration stand until time renders it null. Knowledge of such arrangements cannot, of course, be gained except from the parties concerned. Moreover, trustees who hold property for others, often give a mortgage on their own property as a guarantee of good faith in the fulfilment of their trust, and such mortgages, though they imply no indebtedness, cannot be distinguished from others by the official register. Both these considerations will tend to make the official record of mortgages somewhat in excess of the actual facts.

of the property is comparatively small—less than one-sixth. In the case of mortgaged properties of less than $7\frac{1}{2}$ acres in extent, the average mortgage per acre is much larger, varying from £19:16s. for properties of from $2\frac{1}{2}$ to $7\frac{1}{2}$ acres to £53:2:4 for those of from one-third to one-half of an acre. The explanation of this is, of course, that the proportionate value of buildings to land rises as the area of the latter decreases.

Taking the whole of the land investigated (*i.e.* both that which is, and that which is not, mortgaged), the total mortgage debt amounts on the average to £2:16:5 per acre, or if only the mortgaged land is considered, to £8:0:10 per acre. Assuming the land to be of average value, it will be seen that the mortgage debt, which of course covers buildings as well as land, is equal to $4\frac{3}{4}$ per cent of the value of the land without buildings, if we take into consideration *all* the land investigated, or to $13\frac{1}{2}$ per cent if we are dealing only with that part of it which has some mortgage upon it.

Such an enquiry, although on too slight a scale to indicate the total amount of the mortgage debt on agricultural land in Belgium, emphatically contradicts the assertion that the land of small proprietors is usually mortgaged up to the hilt. The figures afford no evidence that the percentage of those whose property is mortgaged is larger among the small than among the large proprietors.¹

¹ The cost of a mortgage not exceeding £120 is about 7 per cent of the sum borrowed, made up as follows:—

Registration Duty	1·4 per cent.
For making Official Copy of Deed	1·3 "
Law Costs	1·5 "
Lawyer's Disbursements of various kinds	2·8 "

The Law Costs are slightly less in proportion in the case of mortgages for larger amounts; and other reductions, which may amount to as much as 1·35 per cent, are made in the case of renewals of mortgages on very small agricultural properties.

By a recent law, the Registration Duty and Law Costs are reduced by one-half in the case of mortgages on houses bought by working men.

MORTGAGE ENQUIRY

1. Area. ¹	2. Number of Owners investigated.	3. Area investigated.	4. Number of Owners mortgaged.	5. Percentage of Owners mortgaged.	6. Area belonging to Proprietors who have Mort- gages on a Part or the Whole of their Property.	7. Percentage of Total Area investigated which belongs to Proprietors referred to in Column 6.	8. Amount of Mortgages.	9. Average Mortgage		
								Per Acre investigated (Column 8).	Per Acre referred to in Column 6.	
		Acres.			Acres.		£	s.	d.	
Under ½	39	10·71	3	7·5	·98	9·15	45	4	3	5
½-¾	35	15·26	7	20	2·84	18·70	152	9	18	7
¾-1	62	34·75	14	22·5	7·78	22·35	354	10	3	9
1-1½	167	154·62	34	20·3	31·39	20·30	1,482	9	11	7
1½-2½	237	422·37	59	24·9	106·21	25·15	4,310	10	4	0
2½-7½	387	1,840·64	115	29·7	559·70	30·40	11,122	6	0	10
7½-12½	281	2,689·09	102	36·3	984·05	36·60	18,056	6	14	2
12½-25	263	4,732·52	104	39·5	1,917·70	40·50	25,359	5	7	0
25-37	172	5,159·83	65	37·7	1,920·42	37·20	24,011	4	13	0
37-62	131	6,073·73	53	40·4	2,496·43	41·10	24,047	3	19	0
62-86	110	7,812·61	39	35·4	2,798·51	35·80	29,612	3	15	9
86-123	99	10,183·81	25	25·2	2,798·16	27·45	19,403	1	18	0
123-185	119	16,094·52	33	27·7	4,710·04	29·25	73,898	4	11	9
185-247	41	8,909·29	11	26·6	2,452·71	27·50	38,600	4	6	7
247-370	45	13,118·17	11	24·4	3,386·12	25·80	50,932	3	17	7
370-494	22	9,222·98	8	36·3	3,546·67	38·45	8,068	0	17	5
494-741	14	8,610·42	6	42·8	3,545·38	41·15	28,655	3	6	7
741-1235	17	14,967·21	5	29·3	4,814·03	32·15	5,345	0	7	0
1235-2470	8	13,335·58	4	50	6,697·40	50·20	494	0	0	8
Over 2470	2	5,566·63	1	50	2,501·61	44·90	97	0	0	4
	2251	128,954·74	699	31·05	45,278·13	35·10	364,042	2	16	5
								8	0	10

NOTE.—The official returns do not state whether the whole or only a part of a property is mortgaged. Probably small owners mortgage the whole, but the above figures show clearly that some large proprietors only mortgage a part of their property.

¹ The apparently curious grouping in this column is due to the fact that the figures, originally worked out in hectares, have been reduced to acres.

CHAPTER V

LAWS OF SUCCESSION AND INHERITANCE AND METHODS OF LAND TRANSFER

NOTE.—This chapter is necessarily somewhat technical in character, but the facts dealt with have so important a bearing on social conditions in Belgium that it could not suitably be omitted or further curtailed. A very brief summary of its contents is given on p. 65.

THE laws which govern testamentary and intestate succession to land, the duties which attach on its devolution by death, and the methods and cost of transferring it, are matters which materially affect the economic condition of any country. It will, therefore, be necessary to examine these questions in some detail.

Although complete statistics are not available, the results of the enquiry made by the writer indicate that land is much more evenly distributed in Belgium than in England. This is very largely due to the limitations imposed on the right of bequest which exist in the former country, compelling the division of the greater part of a man's property equally among his children, and also to the allied provisions of the Belgian law of intestacy. These provisions not only regulate testamentary and intestate succession, but prevent those settlements of land which English social traditions prescribe, and which in practice keep the larger portion of English agricultural land under the fetters of the custom of primogeniture. The laws of succession and inheritance in Belgium are very complicated, and it is impossible to describe them here in detail. A broad outline is all that can be given.

In principle they are those which are laid down under the Code Napoleon in 1804, though certain modifications have since been made.¹ The fundamental difference between Belgian and English testamentary law is that whereas the latter now gives complete liberty of bequest, the former, in common with those of all other countries whose land systems were remodelled after the French Revolution, severely limits that liberty.

The Belgian law forbids the disinheriting of certain persons called *héritiers réservataires*. These heirs, whose rights are safeguarded by law, are the children and, in certain cases, the parents of the deceased. If there is only one child, the minimum which may be left to this child is one-half of the estate; if there are two children, two-thirds of the estate; if there are three children or more they must receive at least three-quarters of the estate. Personalty and realty both come under the law. The law further prescribes that this minimum left to the children must always be equally divided among them.² There is, however, nothing to prevent that portion of the property which is not specifically reserved for the children (*quotité disponible*) being left to any one of them; thus, if there were four children, the law prescribes that three-quarters of the whole estate must be equally divided among the four, but there is nothing to prevent the parent from leaving the remaining quarter of the estate to any single one of them. In the eye of the law, perfect equality ought to obtain among the portions of the heirs, and for this reason it ordains that any important gifts received from the testator during his lifetime by any of his heirs shall be taken into account, or, as we say in England, "brought into hotchpot," when dividing the property.

A man may leave the *quotité disponible* to his widow or to any one else. He is not obliged by law to leave anything to her. Should a husband having three or more

¹ Notably in 1865, 1896, and 1900. See Appendix, p. 559.

² If any of the testator's children have died leaving issue, these children's portions must be distributed equally among the issue.

children wish to leave his widow more than a quarter of his property, he may in addition give her a life interest in another quarter. The property itself must be left to the children, but it may be left subject to this life interest in favour of the wife.

If a man dies intestate leaving children, subject to the rights of his widow, which are dealt with below,¹ the whole estate is divided equally among the children.² Failing children, one-quarter of his estate goes to his father, one-quarter to his mother, and the remainder is divided equally among his brothers and sisters. Failing children, brothers, sisters, and parents, the law sets forth exactly how the property is to be distributed among the more distant relatives. If there are no direct descendants and no collaterals, and the parents and grandparents are dead, then the estate is divided equally among the illegitimate children, if any; failing these, the estate goes to the widow; and in default of all these, to the State.³ Although it is only in the absence of all blood relations that the widow inherits any property, she gets a life interest in a certain portion.

A second fundamental difference between the Belgian and English laws of succession and inheritance, is that whereas English law allows property to be entailed, this is specifically forbidden by Belgian law. In Belgium, that portion of an estate which must by law be left to the children of the deceased or to other privileged heirs (*héritiers réservataires*), must be left *absolutely free from any charge upon it*, except of course for any easements, mortgages, etc., which are in existence at the testator's death,

¹ In the absence of any contrary provision in the Marriage Contract, the husband has during the marriage the sole right of disposing of the income of the immovable property which his wife possessed at the time of the marriage, but he cannot, without her consent, dispose of the property itself. He can freely dispose of the movable property.

² In case one of his children has died leaving children, that child's share is divided equally amongst his or her children.

³ Illegitimate children, if they have been legally recognised (*reconnus*), receive a less share than they would have received had they been legitimate (C. 757). If they have not been legally recognised they receive nothing.

and except for the possible life interest of the widow in a portion of it.

With regard to the *quotité disponible*, the testator may create any charge he likes upon it, but he may not make any gift of it except an absolute gift.¹

It will at once be seen that these legislative provisions render impossible the existence of the system of primogeniture, which governs the greater part of the agricultural land of England. That such a system maintains its hold in England is not due in any great measure to the law of intestacy which gives the real estate in the absence of a will to the eldest son. Few large landowners die intestate. It is due much more to the liberty which the law gives of making settlements of land by deed or will for the period of a life or lives in being and twenty-one years afterwards, and most of all to the custom of family settlements, under which a man is able to settle on his son for life an estate to come into possession on his own decease, and after the decease of that son on the son's eldest son, and so on *ad infinitum*, or, to use the legal expression, in "tail male."² It is true that as soon as the son's eldest son comes of age he may, with the consent of his father or of his grandfather, if still alive, put an end to the entail. But what generally

¹ There are two exceptions to this:—

1. A father may give his son, either during his lifetime or by will, the whole or part of the *quotité disponible*, making it a condition that on the son's death it shall be equally divided amongst all his son's children living at the time of the son's death.

2. A man may in the same way leave to his brother the whole or part of the *quotité disponible*, making it a condition that on the brother's death the property must be divided equally amongst all the brother's children who may be living at the time; but this liberty is only given to a man who has no children of his own at the time of his death. Transactions of this kind must be registered.

It may be noted here that by a modification of the Code Napoleon which was made in 1900, land left to children may be held by them in co-proprietorship until the youngest is twenty-one. This is an exception to the general law which invalidates any agreement restricting for a longer period than five years the otherwise absolute right of any joint owner to claim the partition of the joint property.

² An estate in "tail male" is an estate settled on male descendants in order of birth. The second son takes, on failure of the male issue of the eldest son, and so *ad infinitum*.

happens when that time arrives is that the son's son, in consideration of an immediate provision for himself, or himself and his wife, unites with his father in making a fresh settlement under which the retention of the land in the hands of one owner is secured for another generation. Undoubtedly under the provisions of the Settled Lands Act the tenant for life of land may now sell it; but as the purchase money must be handed over for investment to the trustees of the settlement, who may themselves, as a rule, purchase other land with it, the net result of the system is to secure the retention of large agricultural estates in single hands.¹

How differently the question of primogeniture is viewed in Belgium and England is well expressed in the following extract from a letter addressed to the writer by a Belgian lawyer:—

As you say, one must not only consider the law in this matter, but also the custom. Now the custom adopted in Belgium, almost without exception, is that of the Napoleonic system, the custom of equal distribution. It is possible with this system to maintain the primogeniture. If there is one child one can leave it all; if there are two, one can leave two-thirds to one of them; if there are three, half to one and a quarter each to the others; if there are four, seven-sixteenths to one and three-sixteenths to each of the others; if there are five, two-fifths to one and three-twentieths to each of the others, and so on.

But the custom of the country would be absolutely opposed to a distribution of this nature, and the father who acted in this way would be generally considered to have acted injudiciously and against the interests of the family. Discords between brothers and sisters would almost certainly result as soon as one of them were "unjustly" favoured, and each of them would feel aggrieved at the injustice done to him. The father would almost certainly be blamed by his children, and also by public opinion, which has adopted the system of the Code as a second law. As a matter of fact, parents do not make a will. They allow a law to act which they consider equitable. The least favour shown to one of the children is resented as an outrage by the others.

We now come to the question of death duties. In this

¹ The writer does not ignore the possibility of creating what is technically known as a base fee; but this is a course which is so rarely pursued that it need not be discussed in detail here.

connection the law discriminates greatly in favour of lineals. These comprise children or remoter issue succeeding to parents, parents succeeding to children or remoter issue, or one parent and children or remoter issue succeeding to the other parent. In the case of lineals the duty (*droit de mutation*) is only 1·4 per cent payable on the real estate and on money lent on mortgage. Other personal property is exempt. If the successors are not in direct line, the personal property is not exempt, and duty (*droit de succession*) is levied on a sliding scale, viz. $5\frac{1}{2}$ per cent if a widow or widower without children succeeds; 6·8 per cent if a brother or sister; 8·2 per cent if an uncle or nephew; and 13·8 per cent if a more distant relative. These rates do not apply to that which any heir receives in excess of the portion to which he has a legal right. On this the successor, whatever his relationship to the deceased, must pay 13·8 per cent.¹

With such a system of inheritance Belgium cannot be said to tie up its land in the hands of the few. The divisions and sales of estates on the death of the owner do at least afford those desirous of obtaining land an opportunity to purchase it.

The distribution of land in Belgium among a large number of owners, and the great number of very small farms are, of course, important factors in the intensive

¹ For purposes of assessment for death duties, the heirs (or executors if there are any, though this is unusual) may, at their choice, declare either the cadastral value (*valeur cadastrale*) of the land or its estimated market price (*valeur vénale*). The cadastral value does not, as a rule, represent the present value of land. In 1860 the annual value of all land in Belgium was assessed, and this annual value was taken as the cadastral revenue which formed the basis of taxation. In order to arrive at the cadastral value, the cadastral revenue is multiplied by a certain figure called the *multipliateur officiel*. Exactly what figure the *multipliateur* shall be is decided by periodical examinations of the movement in land values as shown by the published results of land sales. There is a separate *multipliateur officiel* for each commune, and this applies to all land in that commune. Distinction is made between arable land, and pasture, and land with buildings upon it. The cadastral value at the present time is arrived at by multiplying the cadastral revenue determined in 1860 by the last *multipliateur officiel*, which was fixed in 1894; it is obvious, therefore, that it bears little, if any, relation to actual land values.

cultivation which prevails. Some of the serious disadvantages which would otherwise have attached to this system of small holdings are being largely overcome by the development of co-operation in various directions.

But a further condition is necessary to true free trade in land, namely, that the procedure required for transfer of land shall be simple and inexpensive, so that would-be purchasers are not restrained from buying. The method and cost of land transfer must claim our attention, but first we must examine the system of land registration.

In common with every civilised country in the world, England alone excepted, Belgium has a system of compulsory land registration (*transcription*). Scotland and Ireland have land registration systems, and such backward countries as Russia and Turkey are not without them. The United States and the British self-governing colonies adopted land registration at an early period in their existence. All these varied land systems compel the registration either of titles or of deeds; the English system, which stands alone, compels neither.¹

There can be little doubt that of the two systems, that of registration of title has the greater practical advantages. Registration of deeds does not obviate investigation of title, it only facilitates it; whereas in the system of registration of title, when once the lengthy investigation necessary before land can be registered with an absolute title is over,

¹ This statement is made with regard to the country as a whole; there are some important local exceptions. Registration of deeds has been in force in Middlesex and in the three Ridings of Yorkshire since the beginning of the eighteenth century. Though registration of deeds in these counties is not legally compulsory, it is practically so, as registered assurances take precedence over unregistered ones, and the non-registration of conveyances at any rate is practically unknown. In the county of London, registration of title under the Land Transfer Acts 1895 and 1897 is now compulsory, but this compulsion only applies to what is known as a "possessory title." It does not do away with the necessity for investigation. Machinery for the registration of an absolute title is set up, but it is dilatory, expensive, and, moreover, not compulsory. In practice the provisions for the registration of an absolute title under the Land Transfer Acts are almost a dead letter.

Some further notes on Land Registration will be found in the Appendix, p. 559.

subsequent transactions become comparatively simple. The advantages of both systems are of course greatest in the case of agricultural land, where boundaries seldom shift, and where easements are rarely created. In dealing with town properties, where buildings are constantly being pulled down and rebuilt on sites of altered shape and extent, and where rights of way and other easements are constantly being created, the transfer of the freehold is necessarily more complicated. Moreover, under the English system, conveyances where the title is simple can be got through in a much shorter period than that which is necessarily taken for registration of title by a public office. In the latter, papers must inevitably be dealt with in the order of their deposit. Either system provides security against the frauds which are not infrequent throughout that greater part of England, where neither is in force.

SALE

The legal processes which must be gone through in Belgium when land is sold, need not be described in detail. They are much the same as in any country where registration of deeds is in force, and do not differ greatly from the processes in Yorkshire or the county of London. No land may be sold except through a notary (*notaire*), for no deed can be registered (*transcrit*) which had not been drawn up by one, unless the sale has been specially legalised (*reconnu en justice*)—an unusual course.

It is doubtful whether the time occupied in the formalities connected with the transfer of land is much shorter than in England, taking the average size of transaction into account.

The cost of land transfer is as follows: a tax of $5\frac{1}{2}$ per cent on the purchase money is levied by the State when the deed is registered, and a further $1\frac{1}{4}$ per cent is payable to the *conservateur des hypothèques*, who makes an official copy of the title in the official register. Thus the charges levied by the State on all land sold amount to $6\frac{3}{4}$

per cent of its value.¹ In addition to these charges, the official notaries charge for their services in accordance with a definite scale which is fixed by law, as follows :—

30 shillings per cent on the first	£200
20 " " " following	£800
15 " " " " "	£2000
10 " " " " "	£5000
5 " " " " "	£32,000
2 " " " " "	£40,000
1 " " " " "	£40,000
Nothing on the rest.	The minimum charge is 6s. 4d.

All charges connected with land transfer are payable by the purchaser. In the case of sales by auction the notaries' charges are considerably higher, sometimes amounting to as much as 4 per cent, and even to much more in the case of small parcels of land. The sale of land in which minors are interested must always be by auction.

On comparison of these figures with the cost of similar transactions in England, it will be seen that the transfer of land in Belgium is in ordinary cases very much more expensive than in this country. The stamp duty in England is only 10s. per cent. The registration of a possessory title in the County of London in transactions under £3000 costs 6s. per cent; and the registration of a deed in Yorkshire costs 7s. 6d. irrespective of the value of the property.

With regard to law costs, though the authorised scale in England allows a fee of 30s. per thousand on the first thousand pounds, diminishing as the value goes up, with a minimum charge of £5, yet the amount actually charged in England on transactions of £1000 and under is no greater than in Belgium, except in very small transactions.²

To summarise the costs in a concrete case, a sale of £500 worth of land in Belgium would cost the purchaser

¹ With certain exceptions referred to later.

² In Belgium the lawyers' costs on a £20 sale would only be 6s. 4d., whereas in England the ordinary minimum charge is from one to two guineas.

	£	s.	d.
In registration duty (<i>droit d'enregistrement</i>)	27	10	0
For making official copy of deed (<i>droit de transcription</i>)	6	5	0
In law costs (<i>taxe notariale</i>)	6	0	0
Lawyers' disbursements of various kinds, at least	2	0	0
	<hr/>		
	£41	15	0
	<hr/>		

or $8\frac{1}{3}$ per cent of the cost of the land.

In England (outside London) the purchaser's costs would be

	£	s.	d.
For stamp duty	2	10	0
For registration fee and stamp on memorial (chargeable in Yorkshire and Middlesex only)	0	7	6
For law costs ¹	5	0	0
	<hr/>		
	£7	17	6
	<hr/>		

or $1\frac{1}{2}$ per cent of the cost of the land.

The total cost to the purchaser of the conveyance of land in Belgium would in ordinary cases, therefore, appear to be somewhere between five or six times that of a similar transaction in England.

Important modifications in the laws dealing with the transfer of land were made in 1889 and 1897. By virtue of these working men who buy land in the country (*biens ruraux*) or land for the erection of workmen's houses, obtain a reduction of one-half in the charges levied by the State on the transfer of land. All they need do to secure this reduction is to obtain from the local committee formed for the purpose a certificate that they are *bona fide* working men. These reductions can, however, only be obtained by men whose total property, including that which they are then buying, and also including the property of their wives, is not assessed for land taxation purposes at more than £8 per annum, and the area of the ground upon which they propose to build a workman's dwelling must not exceed 3000 square yards. It will be seen that in these cases the charges imposed by the State are still three times

¹ Even if the authorised maximum were charged, the costs could only be £7:10s.

those imposed in England, though the law costs are somewhat less.

EXCHANGE

Speaking generally, the transfer of land on an exchange is conducted in the same way as a conveyance on sale. There are, however, some differences. The tax of $5\frac{1}{2}$ per cent levied by the State and the fee of $1\frac{1}{4}$ per cent charged for registration are calculated only on the actual money paid to secure equality of exchange. The charges on the remainder of the consideration for the sale, namely, the value of the smaller property, are only 0·65 per cent in the case of the Government tax, and 0·30 per cent in the case of the registration fee. Thus if two plots of land were exchanged, one of which was worth £120 and the other £100, 0·95 per cent would be paid on £100 and $6\frac{3}{4}$ per cent on the £20 paid to secure equality of exchange. The law costs, which are on the same scale as in the case of a sale, are calculated upon the value of the larger property. In cases of exchange of contiguous rural properties the scale charges are, however, limited to 1 per cent for the lawyer and 0·1 per cent for the registration fee.

With the object of facilitating exchange of land, so that proprietors of scattered plots might be encouraged to make exchanges that would help to consolidate their property, a law was passed in 1887 which considerably reduced the charges named above. The registration fee was reduced to 1d. for every £4 worth of land exchanged, and the charge levied by the registrar of mortgages entirely remitted.¹ This law, however, has unfortunately had very

¹ Two conditions are necessary before advantage can be taken of this law: (a) That the market value of the land exchanged shall not exceed 150 times the amount of the cadastral revenue.* (b) That the properties exchanged shall be in the same commune or at least in adjoining ones. If the lots exchanged are not equal, the fee payable on the difference in value as declared in the deed is reduced to 1 per cent. There is a further stipulation that the difference in value of the two pieces of land exchanged must not exceed a quarter of the value of the smaller lot, or one-half if the whole area of this lot does not exceed half an acre.

* *Revenu cadastral*. This is three-quarters of the estimated annual value of the land in 1860. See p. 324.

little effect in consolidating holdings, owing partly to ignorance of its existence among small holders, but largely to the fact that, when exchanges are being discussed, each man tries to minimise the value of the other's property, and to exaggerate that of his own, and hence no exchange takes place. In view, however, of the facilities offered by the law just referred to, the blame for this infrequency of exchanges cannot be laid to the charge of the Government.

GIFTS

Deeds of Gift are prepared and registered in the same way as conveyances on sale. There are, however, some differences. The duties payable to the State, instead of amounting to a uniform $5\frac{1}{2}$ per cent on the purchase money, are calculated on the market value of the land, and the percentages vary according to the relationship of the donee to the donor. In the case of gifts to lineals the inclusive duty is 1·4 per cent. Gifts to other blood relations, to adopted children, and gifts which form part of a marriage contract are charged 3·45 per cent. Gifts to all other persons, including even those to a husband or wife (if they do not form part of the marriage contract), are charged 6·9 per cent. The registration fees are the same as on a conveyance on sale. The scale of law costs is somewhat lower than in the case of a sale.

SUMMARY

Summarising the main facts referred to in this chapter, we find that the laws which govern testamentary and intestate succession in Belgium, tend to the multiplication of owners of land rather than to its aggregation in a few hands, the principle of the law being that subject to a man's right to make a small provision for his widow, the greater part of his property, both real and personal, must, notwithstanding any testamentary disposition to the contrary, pass on his death to his children in equal shares. Certain

laws have been passed in order to avoid excessive subdivision of land.

While there exists in Belgium a system of compulsory registration of deeds which affords security against fraud and makes the transfer of land somewhat simpler, and in the case of small parcels a little less costly, so far as legal charges are concerned, than in most counties in England, these advantages are more than counterbalanced by the heavy burdens imposed by the Government on every change of ownership.¹ The death duties, except in the case of succession by lineals, are very high, while the duties on sales are enormously so. The latter amount to about $6\frac{3}{4}$ per cent on the value of the property sold, as against a charge of $\frac{1}{2}$ per cent in England. This excessive taxation undoubtedly tends to check the sale of land, and the legislature, recognising this, has reduced the charges in the case of very small properties. The total costs incurred in the sale of land vary from about 8 to 13 per cent, and even more, of its capital value.

¹ The cost of mortgaging land is dealt with on p. 52.

PART II
INDUSTRIAL

CHAPTER VI

INDUSTRIAL CONDITIONS

EVER since the age of Charlemagne the region now called Belgium has been renowned for its manufactures, especially for its textiles. For centuries, thousands of Flemish peasants devoted a part of their holdings to growing flax, which they spun and wove at home during the winter, selling the linen together with the other products of their farms. But the introduction of steam-driven machinery changed all this, and now home industries are rapidly giving way before the steam-engine and the factory. Every day the proportion of linen woven in the cottages decreases, and the textile trade itself, which has reigned supreme for so many centuries, may soon have to yield its position to new manufactures which have sprung up during the last fifty years.

Although agriculture has held her own much better than in Britain, industrialism is steadily gaining ground, and absorbs an ever-increasing proportion of the population. Between 1846 and 1896 this proportion rose from 7 to 18 per cent, while that absorbed by agriculture declined from 25 to 19 per cent.¹ Almost every important industry in the world is represented in Belgium, but two-thirds of the workers are occupied in the following half-dozen

¹ These figures are based on the special industrial and agricultural censuses made in 1846, 1895, and 1896. As explained on p. 200, the census figures must be received with great caution, but allowing for all errors, they certainly indicate a marked movement towards the industrialisation of the country.

industries, viz. mining, textile, metal, building, wood-working, and the preparation of food-stuffs.¹

The industries which came in with the introduction of steam-driven machinery are found chiefly in the Walloon provinces, in the neighbourhood of the coal and iron mines, where a great manufacturing zone, stretching from Liège in the east, to Mons and Charleroi in the south-west, has been developed during the last century. Its chief centres lie in and around the town of Liège and in the province of Hainault—the “black country” of Belgium. Here whole regions have been almost completely industrialised: as one travels through them, mines, factories, and great manufacturing villages follow one another in quick succession, and the area of open country is still decreasing rapidly.

¹ In 1896 the industrial workers of Belgium were distributed as follows:—

Industry.	Home Workers.	Out Workers.	Total Number occupied or working for Own Account.
Mines . . . . .	...	121,993	128,313
Quarries	530	35,104	38,969
Metal	7,675	100,541	134,333
Pottery	11	7,043	7,744
Glass . . . . .	...	21,699	22,797
Chemical	48	17,622	20,715
Food	2	57,359	90,443
Textile	76,757	82,768	169,778
Clothing	13,657	38,452	147,966
Building . . . . .	...	62,607	93,577
Wood and furniture	2,304	40,329	88,457
Hide and leather	12,410	18,862	57,702
Tobacco	445	9,740	12,034
Paper	165	8,375	9,448
Book . . . . .	...	10,706	14,049
Mechanical	207	7,340	9,611
Special	4,409	13,807	24,435
Transport ^(a) . . . . .	...	16,959	41,873
	118,620	671,306	1,102,244

^(a) Not including the State railways. The curious discrepancy between the two figures for “Transport” is explained by the fact that in Belgium casual workers are counted among the employing class (being regarded as contractors of their own labour).

Although there are over half a million workers in the Walloon provinces, the only large towns are Liège (157,760), Verviers (49,067), Seraing (37,845), Tournai (35,004), and Namur (31,196); no others can boast of as many as 30,000 inhabitants.¹ The fact that the industrial population is distributed over wide areas, and not concentrated in a few great towns, has an important bearing on the lives of the workers. It enables a large proportion of them to have gardens, and although many of the houses are poor and small, still the people are not crowded into slums, or only to an extent that seems slight when we remember the great factory towns in other countries. The centre of gravity of Belgian industry has been entirely changed by recent developments. Formerly it lay in the Flemish provinces, but now these only number 392,000 industrial workers, compared with 522,000 in the Walloon provinces.²

From this brief outline of the industrial situation, we may turn to those elements in it bearing directly on the life of the individual worker, such as the wage level, the length of the working day, and the general conditions of labour.

The question of most vital importance is that of wages, with regard to which very full information was obtained by the Government in 1896.³ Since then, however, they have risen considerably, and, as up-to-date official figures were not available, except for railway workers and postal employees, with regard to whom a detailed report was published in 1908, it was necessary to undertake a special investigation.⁴ This could not, of course, be done on a scale which would make it possible to classify the whole of the workers according to the amount they earned, as was done in the 1896 census, but the information serves to

¹ The figures of population here given refer to the year 1900.

² Brabant, which is partly Flemish and partly Walloon, is excluded.

³ Published in the *Recensement Général des Industries et des Métiers*, 18 vols.

⁴ Since 1896 special Government enquiries have been made into certain industries, but the latest of these refers to the year 1903, and as the rates of wages have changed considerably since then, these returns could not be made use of.

indicate the general level of wages in 1908. It was gathered by investigators who visited different parts of the country. In many cases the employers were so good as to show their wage-books, in others they stated what wages they paid, and the information was carefully checked by trade-union secretaries and others. In a country like Belgium, where trade-unionism is very weak, the wages paid to individual workmen engaged in similar occupations vary considerably, not only among those employed on piece-work, but among those paid by time. An examination of the wage-books of several employers showed that it would often be very misleading to quote the *average* wages for any particular kind of work, and so the investigators always ascertained the *predominant* wage, *i.e.* the wage most usually paid, and wherever rates of wages are quoted in this chapter as the result of the writer's own investigations, it is to this that reference is made.

Tables are given in the Appendix (p. 561 *et seq.*) where the results of the enquiry are tabulated. It will suffice here to give the more important figures.

The first point to be noted is that even when full allowance is made for the fact that the cost of living is rather less in Belgium than in Great Britain, and much less than in Germany and France, the wages paid in Belgium are, with few exceptions, very inadequate. Take, for instance, the building trades, where the operations are so simple that they lend themselves better than others to accurate international comparisons; the wages of bricklayers, carpenters, plumbers, and plasterers vary from about 3d. an hour in the smaller Flemish towns, to $4\frac{1}{2}$ d. or 5d. in towns such as Brussels, Antwerp, and Charleroi. Bricklayers' labourers are paid from 2d. to $3\frac{3}{4}$ d. an hour, according to the locality. These wages are about half as high as in England, and the same proportion is found in the wages of the engineering trade. In Belgium, fitters, turners, and pattern-makers earn from $3\frac{3}{4}$ d. to $5\frac{1}{2}$ d. per hour, and blacksmiths about a farthing an hour more. In the cotton trade, which is almost entirely carried on in the

Flemish provinces, the difference between Belgian and English wages is very pronounced; although the hours of work are generally about 20 per cent longer in Belgium than in England, the weekly earnings in almost all the different occupations are considerably less.¹

Taking the women first, we find that a winder, while earning from $2\frac{1}{2}$ d. to $2\frac{3}{4}$ d. per hour in Ghent, and less than that in the smaller Flemish centres, usually earns $3\frac{1}{4}$ d. to $3\frac{1}{2}$ d. in Lancashire. For reelers the difference is about the same, while roving frame tenters earn less than 3d. in Belgium and about $4\frac{1}{2}$ d. in Lancashire. Turning to the men, we find that spinners, who earn less than 6d. in Ghent and only $4\frac{1}{2}$ d. an hour in Alost, earn between $9\frac{1}{4}$ d. and 11d. in Lancashire.² Piecers earn $3\frac{1}{4}$ d. in Ghent and from 4d. to 5d. in Lancashire, and grinders about $3\frac{1}{2}$ d. per hour in Ghent and over 6d. in Lancashire, while scutchers, who are paid $3\frac{5}{8}$ d. in Ghent and $2\frac{1}{2}$ d. in Alost, rarely earn less than 6d. in the larger Lancashire spinning centres. The wages of weavers are difficult to compare, because they depend so greatly on the quality and width of the cloth made, but it may be safely asserted that a man working four looms of 36-inch cloth would earn in Belgium at least 1d. per hour less than in Lancashire.

It may be remarked here that many occupations in the

¹ It is extraordinarily difficult to make international comparisons of wages in the textile trades on account of the differences in the processes of manufacture in different countries. The writer has, however, satisfied himself by enquiries specially made in Lancashire, that the wages which he compares in Belgium and in England are really comparable; that is, that the work is similar, and that it is carried on in both countries by adult workers and with similar machinery, although the machinery may be of a somewhat more antiquated type in some of the Belgian mills than it is in the best up-to-date Lancashire factories. The information given in this chapter has been submitted to experts in both Belgium and Lancashire for criticism, and any occupations which they thought incomparable have been eliminated. For the English wages, the writer has used statistics collected by himself from representatives both of employers and workmen in different parts of Lancashire rather than the figures given in the Board of Trade Report (Cd. 4545), because the latter sometimes includes under a general heading the wages paid for operations which vary considerably.

² Information kindly supplied by Mr. Wm. Marsland, Hon. Secretary of the International Federation of Textile Workers' Associations, as a result of a special enquiry made in 1909.

cotton, and still more in the woollen and worsted industries, which are relegated in England to boys and girls, are carried on by men in Belgium. For these, of course, no comparisons have been made. In the woollen and worsted trades the conditions of labour in Belgium are so different from those in Yorkshire, that after much enquiry the writer has felt compelled to abandon any comparison of wages. In the Appendix, however, is given a list of the wages paid in Verviers to those engaged in a few of the principal occupations, in the manufacture of woollen and worsted goods.

In the coal-mining industry, which, in 1896, employed about 130,000 men, the wages in Belgium were also found to be considerably lower than those paid in England. In the absence of published statistics of recent date the writer made special enquiries into the wages paid to coal-miners in both countries. The figures here given refer, in the case of Belgium, to six collieries—two in the Borinage and four in the neighbourhood of Charleroi—and were obtained in 1907. The English figures were taken from the wage-books of a colliery in the West Riding of Yorkshire in 1907.¹

Hewers or getters, by far the largest group of operatives in a coal mine, earn about 5s. 4d. per day in Belgium,² as against 7s. 6d. in Yorkshire, while men employed in opening galleries are paid 4s. 10d. a day in Belgium and 7s. 6d. in Yorkshire. Onsetters and banksmen earn about 3s. 10d. a day in Belgium against 6s. in Yorkshire. Both in Belgium and in England reductions in house rent and in

¹ Wages in the West Riding of Yorkshire may be regarded as fairly typical of those paid in the chief English coal-fields. They are somewhat lower than those paid in South Yorkshire, and perhaps a little higher than wages in Northumberland. Great differences exist in the methods of organising labour in the mines, but care has been taken to select for comparison only those occupations where the conditions of work in the two countries are, broadly speaking, similar. All conditions, however, vary from mine to mine, with the nature of the seam and the difficulty of extracting the coal, and this fact must be borne in mind when considering any comparison of wages.

² The wages given for miners, both in Belgium and in England, are *average* and not *predominant* wages.

the cost of coal for domestic use are part of the colliers' wages. Any differences in the value of these concessions are not sufficiently great seriously to affect the comparison.

In considering the daily earnings in the two countries, it must be remembered that the working day is considerably longer in Belgium than in England, but variations in the methods of calculating the working hours make it impossible to estimate the exact difference. A rough indication of it, however, is given in statistics published by the National Federation of Belgian Miners in 1905, which show that the time spent underground by hewers is from $1\frac{1}{2}$ to 2 hours a day longer in Belgium than in England.

A useful comparison of the level of wages in Belgium and England can be made in the case of railway workers. Full information for Belgium is given in the official report which refers to the year 1908, and although there are no published statistics for England, the writer has been kindly furnished with detailed information regarding the wages paid by a large English railway company. An examination of the figures shows that the Belgian weekly rates vary from one-half to three-quarters of the English, although the Belgians work more hours per week. Thus engine-drivers receive about 25s. per week in Belgium against 45s. in England, and firemen 17s. against 30s.; platelayers 14s. 6d. against 22s.; signalmen about 15s. against 26s.; joiners and carpenters 18s. against 28s.; blacksmiths 18s. against 29s.; boilermakers 18s. against 36s. (exactly one-half); while the bulk of the labourers receive about 12s. 6d. a week as against 19s. in England.

The wages in the postal service in Belgium and Britain are not easy to compare, the organisation of the two services being somewhat different, but it may be noted that the average weekly income of postmen in England (excluding London) is 25s. 9d., as compared with 19s. 6d. in Belgium (including Brussels).

Before passing from the subject of wages, reference should be made to the fact that, although they are still very low in comparison with Britain and certain other

European countries, they are much higher than in 1846, when the average daily wage of men over sixteen years of age was 1s. 2d., and of women 6 $\frac{3}{4}$ d. The 1896 census does not give a general average, but it shows the increase between 1846 and 1896, and, as already stated, wages are, on the whole, higher now (1909) than in 1896.¹

Leaving the public services aside, "how far," it may be asked, "is the low wage per hour made up for by a long working day?" On this point the 1896 census supplies very full information. The hours worked now are, in

¹ WAGES OF BELGIAN WORKERS ABOVE SIXTEEN YEARS OF AGE.

	Men.		Women.	
	1846.	1896.	1846.	1896.
Total number whose wages were ascertained	207,784	465,529	40,673	72,444
Percentage of Workers earning per day—				
5d. or less	8·9		36·6	
5d. to 10d.	17·1	} 4·5	40·4	} 9·1
10d. ,, 1s. 3d.	28·5		17·6	
1s. 3d. ,, 1s. 8d.	24·5	6·2	4·9	30·9
1s. 8d. ,, 2s. 0d.	12·7	13·5	0·4	29·5
2s. 0d. ,, 2s. 5d.	5·5	19·0	0·1	18·5
2s. 5d. ,, 2s. 10d.		21·1	...	7·4
2s. 10d. ,, 3s. 2d.		14·1	...	3·1
3s. 2d. ,, 3s. 7d.	} 0·6	10·9	...	} 1·0
3s. 7d. ,, 4s. 0d.		4·5	...	
4s. 0d. ,, 4s. 5d.		2·9	...	
4s. 5d. ,, 4s. 10d.		1·2	...	
4s. 10d. ,, 5s. 3d.	} 0·1	0·8	...	} 0·5
5s. 3d. ,, 5s. 8d.		0·3	...	
5s. 8s. or more		1·0	...	
	100·0	100·0	100·0	100·0

It will be seen from the above table that in 1896, of the male industrial workers above sixteen years of age, about one-fourth earned less than 2s. per day, about one-fifth from 2s. to 2s. 5d., not quite one-half from 2s. 5d. to 3s. 2d., and only about one-eighth more than 3s. 2d.

Of the women workers above sixteen years of age, about two-fifths earned less than 1s. 3d. per day, one-half from 1s. 3d. to 2s., and only about one-tenth more than 2s.

It may here be stated that in 1896, among juvenile workers of both sexes, about one-quarter earned nothing, or less than 5d., a little more than one-half earned from 5d. to 1s. 3d., and less than one-fifth earned more than 1s. 3d.

certain cases, notably in the textile trades, less than when the census was made, but its figures still hold good for the majority of the workers.¹

In connection with the 1896 census, particulars were obtained of the hours worked by about half a million (504,304) persons, exclusive of miners, whose conditions are special, and will be considered later. Of this half-million it was found that only about one-tenth worked less than nine hours, while half worked about ten, one-third about eleven, and about one-fifth over eleven hours.²

Of those working eleven hours and more, two-thirds (68 per cent) were men, 20 per cent women, and 12 per cent children between thirteen and sixteen years of age. One-third of the women and one-quarter of the children engaged in industries were employed for more than eleven hours a day, whereas only one-sixth of the men worked so long. This is partly because the women and children are largely employed in the textile industries, where the hours are very long, although, as the census shows, more than eleven hours a day are habitual in many other trades.

The low wages in Belgium make it necessary for a considerable number of working-men's wives to add to the family income by working themselves. Present conditions are probably very similar to those prevailing at the time

¹ For the trades investigated by the writer particulars of the hours worked are given in the Appendix, p. 561 *et seq.*

² Total number of workers whose hours of labour were ascertained, 504,304.

Number of Workers.	Hours.	Per cent.
19,138	8 and less	3·79
34,741	8 to 9	6·88
172,012	9 to 10 ^(a)	34·09
77,854	10 to 10½	15·44
88,166	10½ to 11	17·48
70,898	11 to 11½	14·08
30,951	11½ to 12	6·15
10,544	12	2·09

^(a) Mostly 10 hours.

of the 1896 census, when about 4 per cent of the workmen's wives were employed in factories,¹ and another 9 per cent² charring, or keeping small shops or *cabarets*, or in some home industry, such as making lace, corsets, or gloves. Thus altogether, one in eight of the wives of Belgian workmen was engaged in work of some kind, over and above the care of her household.³

It must, however, be remembered that many of those who are engaged in home industries or in looking after *cabarets*, devote a comparatively small part of their time to such occupations. The proportion of married women who work in factories is specially high in East Flanders, where they are employed in the textile industries. In Ghent, for instance, it is nearly one in three, as compared with one in twenty in Liège. It is interesting to note that the infantile death-rate in Ghent is higher than in any other large Belgian town, namely, 23·1 per 100 births on the average of the five years 1903 to 1907, as against 12·9 in Liège.

It might be supposed that in spite of his disadvantages the Belgian workman was at least safe from that "speeding-up" of industry which in some countries handicaps the old so heavily, and that his low wages were partly atoned for by a longer working life. Judging, however, from such published figures as are available, and from information gained from employers and workmen, it does not appear

¹ 413,771 families were investigated, and in the case of 15,000 the mothers went out to work. 4500 of these mothers had no children at home. It is important to notice that the proportion of families where the mother goes out to work in factories decreases rapidly as the number of children increases.

It is 10 per cent in the case of married women without children.

„ 4 „ „ „ with 1 or 2 children.

„ 1 „ „ „ „ 3 or 4 „

„ $\frac{1}{2}$ „ „ „ „ 5 or more children.

² This figure (9 per cent) refers only to married women with children. Had those without children been included, a percentage higher than 9 would have been recorded.

³ These figures only take account of those engaged in commerce or working for wages. They do not include the wives of industrial workmen living in the country, who work on the plots of land attached to their houses, and, by the crops they raise, add materially to the family income.

that workmen are employed up to a greater age in Belgian than in British factories. It is true that those who have the necessary training may, in certain parts of the country, fall back on home industries when they have grown too old for factory work, but as the wages to be earned in most of them, even by the best and most vigorous workmen, are considerably below those paid in factories, it is certain that an old man could not hope for much from this source. Probably his chief advantage over an old man in Britain, is that very often he has a plot of land on which he can employ himself when unable to get a job.¹

To complete our survey of industrial conditions, we must enquire into the actual state of Belgian factories from the standpoint of the health of the workers, and into the character of factory legislation. So far as hygiene and sanitation are concerned, there is not much to distinguish them from those in Britain. There are very few "model" ones, and the proportion of those where the conditions are somewhat primitive is rather high; but, speaking generally, it is the opinion of the writer, after visiting many establishments, large and small, all over the country, that, as regards cleanliness and comfort, and also as regards the personal treatment of employees by the overlookers and others in authority, the conditions are as good, or at any rate almost as good, as in Britain.

Turning to the laws for the regulation of labour, and leaving the mining industry out of account, it may be said that Belgian labour legislation dates from an enquiry held in 1886, consequent upon industrial disturbances, "to investigate the conditions of industrial labour in the kingdom, and to study any measures which might be adopted to improve them."² Since 1886 a number of measures have become law, partly by enactment and partly by royal decree, which have aimed at defining the relationship between employer and employed, and establish-

¹ Many workers aged sixty-five and over receive the Government pension of a shilling (1.25 fr.) a week. See p. 464.

² A small and not very important piece of labour legislation was enacted in 1883.

ing public control over the conditions of labour. We need only deal here with a few of these.

The truck system and the payment of wages in public-houses were prohibited in 1887, and in 1889 the employment in factories of children under twelve years was forbidden, and the hours of labour were restricted to twelve per day for boys under sixteen, and for girls and women under twenty-one. It cannot be said that this was a drastic measure; but it had taken fifty years to bring public opinion even up to this level, for a bill having a somewhat similar purpose was introduced unsuccessfully as early as 1843. Since 1889 the hours of children and women under twenty-one years of age in textile factories have been further reduced—to sixty-six hours per week—and other reductions in the length of the working week, affecting particular trades, have been made. The law of 1889 also prohibited the occupation in factories of women for four weeks after confinement, and the night labour of women and young persons. In practice, however, the exceptions allowed to the latter prohibition are numerous, especially in the glass and sugar industries. Women under twenty-one years of age are excluded by this law from underground work in the mines.

In 1903 a Workmen's Compensation Act was passed, giving industrial workers the right to claim compensation (not exceeding half the loss incurred) for injuries sustained in the prosecution of their work, from whatever cause. Prior to this no workman could claim any compensation unless he could prove that the injury was due to negligence on the part of the employer—a thing usually very difficult to do.

In 1905 two additions were made to factory legislation. The first was a royal decree restricting the hours of work for children under thirteen to six per day, and the second, a law limiting the working days for all operatives to six per week, except where special exemptions are granted.¹ As a matter

¹ An enquiry made by the *Office du Travail* in 1895 shows that of a total of about 120,000 workers for whom returns were obtained, 35 per cent

of fact these exemptions are so numerous that the object of the law has been very largely defeated.

This is a brief outline of the principal factory legislation, but there are other Acts dealing with matters of less importance, one, for instance, requiring the conditions of work and the basis of calculating piece wages, etc., to be written out, and put up in the factories, and one which deals with unhealthy or dangerous occupations. An Act may also be mentioned which sets forth the respective rights and duties of masters and employees.

It will be seen from this list that there is nothing in the Belgian labour legislation of a very original nature. The legal provision made for the protection of labour and the regulation of industry is of comparatively recent date, and is considerably less than in Britain and certain other industrial countries. Moreover—if one may judge from the complaints heard in different regions—even the few laws which have been enacted are often somewhat laxly administered. Factory inspection, established in 1888, was reorganised in 1895, but there are too few inspectors to do the work efficiently. In 1905 there were only 22 provincial inspectors, in addition to about 6 officers attached to the central staff at Brussels.

In the mines, the dangers to the men have much diminished, owing to technical improvements in the exploitation of coal seams.¹ But as the depth at which it is carried on increases, the work grows more unhealthy; there are more accumulations of gases, and the heat is often unbearable. The miners' friendly societies quote assurance rates higher

worked on Sundays. More than 10 per cent of these worked every Sunday, and 88 per cent of all Sunday workers were employed productively, and not merely at occupations connected with the cleaning, repair, or maintenance of machinery.

¹ The reduction in the number of accidents in the mines has been remarkable. For every 10,000 workers employed during the ten years 1861 to 1870 there were annually 26·05 accidents; from 1871 to 1880, 24·50; from 1881 to 1890, 19·92; 1891 to 1900, 13·91; and during the five years 1901 to 1905, 10·02. "This excellent result of preventive measures," says a Government report, "is better than that obtained in any other mining country, in spite of the fact that, on account of depth and fire-damp, the Belgian mines are the most dangerous in the world."

by at least 20 to 25 per cent than those of other industries.

Before closing this chapter an attempt must be made to explain why wages in Belgium are so much lower than in Britain. It is a matter which gravely affects the Belgian, since, though the cost of his food is somewhat less and his rent is a good deal less, these advantages do not compensate him for the great difference in the wage. Although he is comparatively well housed, his food is coarser and he has less scope for the satisfaction of individual tastes, and his clothing is both less elaborate and less adequate. He spends less (although a larger proportion of his wage) on drink than does the British workman, and though his wages are much less, he must work considerably longer to earn them. What is the explanation of the low wages in Belgium? Let us first see whether the productivity of the Belgian is less than that of the British workman. In the hope of answering this question, the writer visited a number of factories, and sought to discover processes of manufacture where the conditions of work were exactly identical in the two nations, but there was always some disturbing element. He was obliged therefore to fall back upon general observations, and discussion of the matter with employers and labour leaders who knew the conditions of work in both countries. He found the opinion almost universal that the output of the Belgian was somewhat less than that of the British workman, but not to nearly so great an extent as is represented by the difference in their wages.

The somewhat low efficiency of the Belgian workman is partly due to the very low level of general education in the country. It will be shown (p. 264) that probably about a quarter of the workmen can neither write nor read, and this illiteracy may be taken as the measure of their intellectual development, since we have no reason to suppose that their mental faculties have been unusually developed in other directions instead. Thus, generally speaking, they are less intelligent than the British workmen, less alert, less able to grasp a point quickly and clearly, more enslaved by

routine. This is especially true in the Flemish provinces, where, except in Antwerp and Ghent, the standard of education is much lower than in the Walloon provinces. And this low standard operates against the efficiency of the Belgian workman in another way, by rendering technical instruction much less effective than it otherwise would be. In conversation with the director of one of the most important technical schools in Belgium, the writer was informed that it was exceedingly difficult to give any technical instruction at all.

Yet the Belgian is capable of doing really good work, and doing it quickly, when given the proper conditions for the development of his powers, for when abroad he soon equals in efficiency the men among whom he is working, a fact which shows that race plays but little, if any, part in solving the problem under consideration.¹ But there is in Belgium, and especially in the Flemish parts, an absence of stimulating surroundings, and the pace is traditionally slow. Men work as well and as quickly as they see their neighbours working. "Why should we do more?" they naturally ask. They work for long hours at a rather lagging rate.

Another cause for the somewhat inferior efficiency of the Belgian is his low standard of living. In the case of the families investigated by the writer whose wages were under 16s. 8d. a week, there was, upon the average, a deficiency of 26 per cent in the supply of protein, and of 14 per cent in that of fuel energy.² These families, it must be remembered, were, for the most part, thrifty and respectable, spending but little money upon drink or other unnecessary objects. There is no doubt that there are hundreds of thousands of workmen in Belgium who are habitually under-nourished. As a well-known American economist³ has reminded us:—

¹ No doubt it is the more energetic and better educated men who go abroad, but the improvement even in these when they work in a more stimulating environment shows that external conditions and not race characteristics, are responsible for the somewhat low productivity in Belgium.

² Standard requirements taken as Protein 125 grams per man per day, Fuel Energy 3500 calories per man per day. See p. 352.

³ Walker, *The Wages Question*, p. 53.

What an employer will get out of his workman will depend very much on what he first gets into him. Not only are bone and muscle to be built up and kept up by food, but every stroke of the arm involves an expenditure of nervous energy which is to be supplied only through the alimentary canal. What a man can do in twenty-four hours will depend very much on what he can have to eat in those twenty-four hours; or perhaps it would be more correct to say, what he has had to eat the twenty-four hours previous. If his diet be liberal, his work may be mighty. If he be under-fed, he must under-work.

It is not that the under-nourished families in Belgium suffer from the pangs of starvation. They are in the same condition as a horse fed upon grass, which may satisfy its hunger, and even grow fat, but cannot do hard work. Every keeper of horses knows that if he wants hard work from them, he must give them really nutritious food, and those who are concerned for the industrial interests of Belgium should be reminded that if they are to achieve permanent commercial prosperity, they cannot do it so long as their workers are under-fed.

Another fact tending to lower the average output of the Belgian workers is that the equipment and organisation of many of the factories are old-fashioned, and those engaged in them are thus handicapped and unable to produce the greatest possible output per man.¹

To sum up this part of our enquiry, we see that the Belgian workman, not on account of racial characteristics, but for reasons which could be obviated, is rather less productive than the Britisher, but the difference is not nearly so great as the difference in their wages.

What other reasons are there for the fact that wages in Belgium are so much lower than in Britain? One reason is that the British manufacturers, who were in the field earlier than the Belgians, have succeeded in securing and

¹ The writer has visited factories in Belgium which compare favourably in these matters with the best seen elsewhere, but, generally speaking, the equipment and organisation are not so good as in Britain. No doubt we are here confronted with a vicious circle. The productivity per man is small partly because the equipment and organisation of the factories are not up-to-date; but this in its turn is indirectly due to low wages: were these higher, manufacturers could not compete satisfactorily in the world's markets, unless their factories were up-to-date. It does not pay to put in labour-saving machines if wages are very low.

holding a large share of the most profitable trade in the world. They have established for many of their goods so high a reputation that customers insist on having them in preference to those offered by other countries.

Belgian manufacturers have hitherto largely failed to establish a similar reputation for the articles they make; indeed, on the world's markets they have entered on a competition of price, rather than of quality. The economic position of a workman engaged in making goods of very high quality is usually stronger than that of one making goods of second quality; and as there are proportionately more of the former in England than in Belgium, the economic position of the English is, on this account, stronger than that of the Belgian workman.

Another reason for the low wages in Belgium is that the workmen are not strenuous in demanding the full market value of their labour. They have for so long been accustomed to a low standard of comfort, that they have become reconciled to it, and do not strive actively to improve their position. This is especially true of the Fleming, whose wages are, as a rule, much lower than those of the Walloon. His meagre education has done little or nothing to widen his horizon and general outlook; he lives in a state of inertia; he is willing to plod on as his father did before him, and it is difficult to persuade him to leave the beaten track. Told of the better labour conditions in Britain, of the shorter hours, and the higher pay, such men shrug their shoulders and reply, "Ah, yes; but for us it is impossible." Thus it is hard to organise them into strong trade unions, and, as we shall see,¹ that whole movement is still but in its infancy in Belgium.

No doubt lethargy in these matters is partly due to the system—especially widespread in Flanders, where wages are lowest—under which small doles are given through the *Bureaux de Bienfaisance* to supplement poor wages. The effect of this upon the spirit of independence of the workmen is disastrous. It is not that the sums paid are in

¹ Chap. viii. p. 101.

themselves large ; generally, as we shall see in the chapter on "Pauperism," they amount only to a franc a week or even less. But they are certain, and the workmen feel that if they join trade unions, or in their efforts to obtain an increase of wages, in any way offend the well-to-do persons who are responsible for the distribution of charity, they may lose this certainty, and perhaps not get higher wages after all.

Another cause, which has frequently been mentioned to the writer as in part accounting for the fact that the Belgian workman does not strenuously demand his full economic wage, is that the teaching and influence of the Catholic Church discourage such action. And this for two reasons : first, that the Church seeks to concentrate a man's thought and interest on the after life, and looks askance at activities which might shift the centre of gravity from heaven to earth—it therefore preaches resignation rather than vigorous efforts to improve material conditions ; and second, that the workers most active in seeking to obtain higher wages are the Socialists, who are strong opponents of the Church, and the priests try to keep the faithful from mixing with such dangerous companions. To prevent this, a number of Catholic trade unions have been started, but they are not nearly so militant as those of the Socialists : their principal object is to provide against sickness and unemployment, and the masters often subscribe to their funds.

Summarising what has been said in this chapter, we find that Belgium is becoming increasingly an industrial country. She is engaged in a great variety of manufactures, and her imports and exports are large. But the wages paid to the workers are very low ; in some industries less than half those paid in England.

As a result of a very careful examination of the whole question, the writer has come to the conclusion that the main causes for this are :—

1. The productivity of the workmen is somewhat lower than in England. (This is due to removable causes, and not to racial differences.)

2. A smaller proportion of the Belgian workmen are engaged in the manufacture of goods of very high quality.

3. The Belgian workmen are less strenuous in demanding from their employers the full market value of their labour.

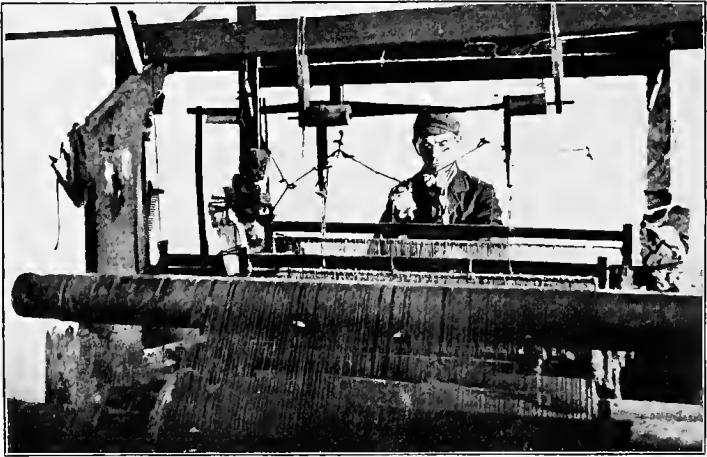
CHAPTER VII

HOME INDUSTRIES

WE must now turn to another aspect of Belgian labour, namely the Home Industries.¹ Belgium has long been recognised as a country in which these are largely developed, and when the Industrial Census was made in 1896, it was found that about 118,000 persons, or a seventh of the whole industrial population, were occupied in them. It is important in the present connection to know whether they are comparable with the sweated industries of East London, which represent the last resource of a poverty-stricken section of the population, or whether they are a healthful and valuable accessory to a system of peasant cultivation, occupying the leisure time of people unable to employ themselves profitably all the year round on their small holdings. It will also be interesting to enquire whether they are increasing or decreasing.

Although there are no records of the number of persons engaged in home industries later than those for 1896, the official sources of information on the subject are very complete, for the Government has, in connection with other matters, carefully investigated the conditions under which home industries are carried on, and a series of volumes dealing

¹ In this chapter the term "home industries" is meant to imply trades carried on either in the home or in a workshop attached to it, by persons who are working for an employer, either directly or through an intermediary, the employer, as a rule, supplying the raw material and disposing of the produce. The term does not include the work of independent artisans who work at home and dispose of their produce in the market or to customers of their own.



A FLEMISH WEAVER AT WORK IN HIS COTTAGE.



A FLEMISH WEAVER PREPARING HIS BOBBINS.

with the whole question has been published from time to time during the last ten years. The present writer has made use of these to supplement the information which he himself has obtained in the course of a large number of visits paid to home workers employed in various trades in different parts of the country.

By far the most important home industry in Belgium is lace-making, which, in 1896, occupied 50,000 persons, almost all women. Twenty years earlier, however, the number was three times as great, and recent evidence shows that since the census was taken it has continued to decline.

The same is true of linen weaving, with 11,000 persons employed in 1896—only one-seventh as many as in 1840 (74,000). In the old days it was the regular custom for the Flemish peasant to cultivate his own flax. This was retted (*rouï*) either in a well or in the river Lys—the Golden River, as it is called, on account of the wonderful colour and quality of the linen bleached in its waters, which the cleverest chemists have failed to imitate. It was then spun and woven in the winter time, when work on the farm was impossible. But these days are past, and every year adds to the proportion of factory-woven linen.

Bootmaking occupied 7350 persons in 1896—an increase on the number employed in 1840—but since 1896 the manufacture of boots by machinery has been considerably developed, and the number of home workers has declined.

The various clothing trades seem, on the other hand, slightly to have gained ground, their 12,000 persons of 1896 being an increase of 3 per cent on the figures of half a century before.¹ Other instances of home industries

¹ In addition to the 12,000 mentioned above, there were in 1896, 74,000 persons who worked at home, or in workshops attached to their homes, 55,000 of whom only “employed” themselves, while 4000 employed also members of their own families. But these were returned by the census as employers (*patrons*) either because they occasionally made suits directly for customers, or because they worked for two or more employers, and were mysteriously classified as contractors.

which are holding their own are the cutting and sewing of kid gloves (4000 persons) and the making of fire-arms (8400 persons), the latter carried on almost exclusively in the neighbourhood of Liège. With the mention of wool and cotton-weaving, which in 1896 occupied respectively 8100 and 2450 persons, and both of which are decaying rapidly, we have completed the list of industries of sufficient importance to require special mention. Taken together, these accounted for five-sixths of the Belgian home workers, the rest being engaged in a great number of little industries: straw-plaiting, rope-making, marble-polishing, jute and hemp-weaving, hosiery and millinery, corset-making, brewing, and the manufacture of cigars, of furniture, sabots, baskets, knives, nails, chains, etc.

No one who considers the average earnings of these people, in relation to the number of hours they work, can fail to realise why the younger generation prefers factory life. To be sure, as home workers are always paid "on piece," their wages vary greatly, but even the maximum, which only a few can secure, is below the level of the factory.

M. Pierre Verhaegen¹ gives particulars of 151 lace-makers, working on the average $11\frac{1}{2}$ hours per day, whose earnings average less than a penny (9·4 cts.) per hour, or tenpence (1·08 franc) per day. Of another 43 lace-makers, mostly women with household duties to perform, and only devoting $5\frac{1}{2}$ hours a day to their lace, the net earnings average four-fifths of a penny (8·2 centimes) per hour, or $4\frac{1}{4}$ d. (46 centimes) per day. The ordinary income of a woman lace-maker in the prime of life may be put down at between 10d. and 1s. 3d. for a day of from ten to twelve hours' work. This estimate is borne out by the writer's own observations. Here, for instance, are a couple of extracts from his notebook, both referring to communes in East Flanders, and taken when visiting home workers in 1906:—

¹ *Les Industries à domicile*, vol. v. 1902. The figures given do not include the wages of aged persons or children, who only work slowly or intermittently, and earn from 5d. to 7d. a day.



LACE-MAKING IN FLANDERS.



A TAILOR AND HIS THREE SONS IN HIS WORKSHOP, WHICH IS ATTACHED TO THE DWELLING IN BINCHE.

To face page 91.

Farmer with $7\frac{1}{2}$ acres, ten beasts. His two daughters make lace. Work from 5.30 A.M. to 10 or 11 at night, stopping only a short time for meals. Earn up to 1s. 7d. a day.

And again:—

Lace-maker. Small house. Earth floor. Walls rendered in mortar but not plastered. Two rooms and a scullery on ground floor. Rent £2 : 8s. a year. Father works in France during summer. Daughter making lace earns a shilling a day for twelve hours' work. Works from 7 A.M. to 10 P.M., with three hours off.

The writer well remembers these cases. In the first the girls were quick and clean, and made very fine lace. The home was a comfortable one, and they looked happy and healthy, notwithstanding their terribly long hours. They need not have worked so long, but wanted the extra money for dress. The other case was very different—a bare and cheerless home, the father a "Francsman" away all summer working in France. Here it was hard necessity which drove the daughter to sit twelve hours a day at her lace cushion, making lovely lace for a penny an hour! Her case is not exceptional by any means—probably, as stated above, the majority of lace workers are earning very similar wages.

Female glove sewers in Flanders, according to the Government report,¹ make on an average about 10d. to 1s. 3d. a day—a fact confirmed by the writer's own investigations. "Glove-maker; can earn from 10d. to 1s. for $11\frac{1}{2}$ hours' work, and has to pay 5d. a month for use of the machine," is, for instance, the note made when visiting a glove-maker in Wilderen (Limbourg).

The cutlers of Gembloux and nailmakers get about 1s. 9d. a day. Shoemakers, except at Iseghem, where their earnings rise to a maximum of about 3s. 2d., do not, as a rule, make more than 2s. 5d. a day, out of which 10 per cent must be spent for materials. Of thirty-two cases reported by M. Dubois² of linen weavers (men), including weavers of fine cambrics and damasks, the average daily

¹ *Les Industries à domicile*, vol. iii. 1900.

² *Ibid.* vol. ii. 1900.

earnings were 1s. 7d., out of which at least 10 per cent went in expenses charged to the worker. M. Dubois also gives particulars of the earnings of twenty-three people engaged in hosiery, which averaged 1s. 6d. a day.¹

The wages and conditions in some of the smaller industries are much the same as in the larger ones. The writer has visited a number of homes where these are carried on, and descriptions of a few may be given.

In Lokeren (East Flanders) a considerable number of families are engaged in preparing rabbit skins for various purposes. This trade is particularly offensive and unhealthy, as it involves an atmosphere full of dust; and the fact that many of the skins have been treated with mercuric chloride renders it still more noxious. In a small room, perhaps 10 or 11 feet square, the writer visited three men who worked at this vile occupation from six in the morning till half-past seven at night, merely taking time off for meals, and who could only earn about 1s. 6d. each a day. Another family visited in the same town lived in a little house, using the front room as a shop, where some trifling articles, whose total value could not have been more than a few shillings, were exposed for sale. Behind the shop was the living-room. To the left of the door was the bed; in front was a small window, beside which three people were working on the rabbit skins—a man, his wife, and a boy of twelve years. At the mother's side was a cot with a baby six months old. The stench was horrible, and the room full of dust. By beginning work at six in the morning, and continuing until seven at night, with an hour for dinner, the family of three could earn 12s. a week. The boy could neither read nor write, for he had to begin to work at five years of age. These workers were not very quick or efficient, but making full allowances for this, the wages were terribly low, and the conditions were unspeakable. The case illustrates the constant association of such conditions with child labour. The children who are pressed into the service of the "domestic workshop" tend to grow up with very irregular

¹ *Les Industries à domicile*, vol. vii. 1905, pp. 127 *et seq.*

education, or with none at all, and to reinforce the class of untaught, untrained workers, but for whose existence the worst-paid home industries would soon vanish before the factory.

In another room in the same village five girls were plying the same trade. They could work much more quickly, and the quickest of them earned as much as 9s. 9d. a week. An ironic touch in this instance was the presence of a large cage of live rabbits at the side of the room, waiting presumably until they were old enough to have their skins turned into "silk" hats! This trade, of course, is peculiarly offensive and unhealthy, but the wages in many others are terribly low. In rope-making, for instance, found almost exclusively in East Flanders, the labour of young children is shamelessly exploited, and for twelve hours a day little lads and girls not yet in their teens have to sit and turn the great wooden wheel which twists the rope. In one case visited, the ropemaker, working long hours, earned 9s. 9d. a week, and the child helping him 1s. 2d.!! The wages of the sabot-makers are only slightly better, notwithstanding the fact that the work is hard and requires considerable skill. About 12s. or a little more is all that men can earn for a week's work.

On the other hand there are some trades in which the pay is decidedly better. The writer has visited homes where girls making corsets earn 2s. 5d. a day, working for eleven hours, and comparatively high wages are earned by the tailors in Binche, near Mons, the seat of the tailoring industry. Here a good tailor working from six in the morning until eight at night, with two hours off, can earn from 3s. 3d. to 4s. a day. The writer visited one home where a father was engaged with his three sons, all of them clever workmen, though the ages of the lads were only 15, 16½, and 19 respectively. These four, working for twelve hours a day, and getting the wife to make buttonholes, could earn between them 12s. 9d. a day, but, as they told us, they must "never lose a minute." They were most intelligent, industrious people, who lived in a nice house

with a well-lit workshop built on at the back. Another tailor visited at Binche told us that he and his wife and daughter could earn about 44s. a week between them. A third, working with his wife and two girls, earned about £2 a week. In considering these wages it must be remembered that in all cases deduction must be made for cotton, use of sewing machine, and rent of workshop, none of which are provided by the employers.

A few more instances may be worth quoting.

A tailor in Antwerp stated that he worked daily from 6 A.M. to 7 P.M., with one or two hours off, and his wife helped him part of the time. Together their earnings amounted to 24s. a week, but from this must be deducted about 1s. 9d. for cotton and silk thread and the wear and tear of the sewing machine. This machine costs £10, and lasts about ten years.

A tailor visited in Courtrai made more than this, but his wife gave him much more help. He worked six or seven hours on Monday, twelve hours on Tuesday, fifteen hours on the four following days, and eight or twelve hours on Sundays, earning 32s. a week on the average. His Sunday occupation was to tout for orders for suits of clothes from French workmen.

Clothing is much cheaper in Belgium than in France, on account of the high protective duty in the latter country, and, consequently, every Sunday numbers of French workmen pass over the frontier dressed in their very oldest clothes; they then buy new suits, which they don immediately, and in which they return to France at night, leaving their old ones behind. As they are wearing the new suits, they can pass the frontier without paying duty on them! The go-ahead tailors in the Belgian towns on the borders of France employ the home workmen to perambulate the streets on Sundays on the look-out for these Frenchmen, and pay a commission on every suit they sell.

All the tailors referred to above were really good workmen, who could turn their hands to practically anything.

Those who are less skilled of course earn less money. In Courtrai we visited a man who could only make waistcoats, and who said that even with the aid of a young apprentice he scarcely averaged 16s. a week, although he worked from six in the morning to half-past nine at night, with $2\frac{1}{4}$ hours' rest.

Another home worker visited in Courtrai was a cap-maker, who worked twelve hours a day. For $9\frac{1}{2}$ hours daily he was aided by his son, aged fifteen, and a youth aged seventeen. Together, they could earn 5s. 9d. a day, but the thread and other items cost 8d. a day, leaving 5s. 1d. as the net result for the three. It was interesting to note that the caps they were making on the occasion of this visit bore an English trade mark, and were marked "Best London"!

Taking all home industries together, it is probable that on the average the men earn from 1s. 9d. to 2s. 5d. a day, and the women from 10d. to 1s. 3d. for eleven hours of work or more.

Let us now see how far such trades are combined with agricultural or other occupations, and how far they constitute the whole source of income of those engaged in them. It is sometimes supposed that in countries like Belgium home industries are merely accessory to a system of peasant cultivation, supplying work for those periods of the year, chiefly in winter, when the peasant and his family would otherwise remain idle. A study of the question points, however, to the conclusion that in the case of the men the home industry itself almost invariably constitutes the chief source of income. Certainly it is a common thing during the summer months for them to leave their trade for a time to go out as agricultural labourers, when the offer of "piece work" enables them to earn higher wages than would be possible at their usual task, but it is not always field labour for which they relinquish their ordinary occupation. Whenever there is an especially active demand for labour of a kind which they can supply, there are many who are willing to take the opportunity of temporarily

increasing their income. They go as "brush hands" when the demand for house-painting is great, or they enter other trades. But generally it is agriculture which claims them, and this is not surprising, for—as M. Dubois in his report on home workers says—"all the weavers" (and the same is true in other trades), "no matter who they are, remain at bottom agricultural workers who return to the soil whenever they get the chance." This may be a somewhat liberal interpretation of the facts, but it is certain that the severance between the industrial and agricultural populations is not nearly so absolute in Belgium as in England, and a large proportion of those engaged in industry can quite well hold their own in the less skilled labours of field or garden. This is not, however, to say that agriculture and home industries are interdependent. There are not many cases where a *bona fide* peasant cultivator regularly takes up a home industry during a portion of the year; and though many a home worker has a little bit of land which he cultivates, this is nothing more than an allotment, the produce of which constitutes a welcome but not very important addition to his annual income.

Women's labour is on a different footing. In many cases—indeed it may be said in the majority of cases—the income derived from it is supplementary to that of a husband or brother. This is obvious from a consideration of the very low wages earned. But even as regards the women it cannot be maintained that home industries are especially associated with peasant cultivation. There are certain districts of Belgium where, for reasons familiar to the readers of Belgian history, home industries have become established, but they are not necessarily among those in which peasant cultivation predominates. Certainly the two regions coincide in Flanders; indeed it is here, and to a less extent in Brabant and a portion of the province of Liège, that the great bulk of home industries are found. But there are large areas in Belgium where peasant cultivation prospers that contain practically no home industries—for instance, the arrondissement of Virton. Moreover, it is not

only among peasant cultivators that one must look for them—the wives and daughters of the town workers are engaged in them just as frequently as the families of peasant cultivators. The writer is inclined personally to associate home industries, as existing in Belgium, with the poor parts of the country. When travelling recently in France, investigating social conditions, a French professor said to him as they passed through a district noted for its home industries, “Wherever you find home industries you may be sure that the region is a poor one.” With slight exceptions this seems to be true in Belgium.

If the home industries which are so widely carried on in Belgium cannot be explained by their connection with a system of small holdings, how can we account for them? How is it that they employ so many people at wages in most cases considerably below the factory level? No doubt they allow a certain amount of liberty to the worker which is denied to the factory hand. He need not begin on the stroke of the factory bell, he may smoke and talk at his work, or have a chat with a neighbour, or stop and drink a glass of beer, and probably for these advantages he is willing to make some financial sacrifices. There are, however, more substantial causes for the prevalence of home industries. First, it must be recognised that in Belgium they are not of modern creation, as many of them are in Britain, but relics of the industrial era which preceded the age of factories; and they really illustrate the way in which the rate of progress is retarded by the friction which it involves. It must be remembered that the factory system was introduced into Belgium later than into England, and its development has, of course, been gradual, so that some of those now engaged in home industries were too old to seek for work in the factories when these were established. And while it is true that the younger generation is realising more and more the advantages of the factory, and there is a steady drift in its direction, the transition naturally takes time. There are still a number of workers who, whether for personal reasons or from sheer lack of initiative and the

absence of any obvious opening, are content to follow in the footsteps of their fathers, and cannot make up their minds to take the decisive step and forsake home for the factory. As has been stated, however, their number is diminishing, except in trades such as that of the tailors at Binche, where the factory worker has no mechanical advantage over the home worker, and there is nothing to induce the latter to change. This was also the case until recently with the boot-makers, but now, as we have seen, boots are being increasingly manufactured by machinery, and the home worker cannot ultimately stand out against it.

The presence of so many women among the ranks of home workers is more easily explained. Here, as we have seen, the earnings are usually subsidiary to other sources of income. Doubtless there might be openings in factories for a number of the girls who are making lace in the Flemish villages, but to take advantage of them would mean a very early start each morning to catch the workmen's train, and a return late at night, and it is not surprising that their parents prefer them to continue the old occupation at home, even if the remuneration is less. So with the other industries followed by women. Even their ranks, however, are continually thinning. The goods which once were made by hand, such as lace, are now increasingly made by machinery, and hand-spinners and weavers can no longer hold their own, although they will attempt to do so longer than the men, because, as a rule, they are not wholly dependent on their wages.

The reasons for the very low wages in home industries differ in different trades, but in them all the workers are crippled by their entire lack of organisation. This lays them open to exploitation, which is often shameless on the part of the middlemen, who sometimes wrest from them a profit of 25 per cent on materials supplied, and who not infrequently force them, in spite of the Truck Acts, to buy all their goods at particular shops. And when, as in most home industries, the workers are not only unorganised, but have to compete with machine-made goods, it is clear

that any effort on their part to obtain higher wages would be absolutely hopeless. The articles they produce can only be sold at prices which would make it impossible for the employer to pay higher wages, even if he wished to do so.

CHAPTER VIII

TRADE UNIONISM

It has already been stated that one of the chief reasons why wages in Belgium are so low is that they are still largely fixed by individual instead of by collective bargaining, the Trade Union movement being yet in its infancy, although it is now growing rapidly, as evidenced by the following figures. In 1891, according to M. Vandervelde's estimate,¹ there were only 65,000 organised workmen in the whole country. In 1901 M. Varlez gave the number as 132,000,² and in 1909 it had increased to about 200,000, or 16 per cent of the industrial population.³

In Great Britain, in 1906, only 21·7 per cent of the

¹ *Enquête sur les syndicats belges.*

² *Quelques pages d'histoire syndicale.* Published by the Musée Social, Paris.

³ 17·8 per cent of the male and 4·7 per cent of the female industrial workers are members of Trade Unions. In calculating the proportion of organised workers it has been assumed that the number of industrial workers in Belgium has increased since the date of the Industrial Census (1896) at the same rate as the population, viz. by 15 per cent.

This figure is only a rough one, for the state of Trade Union statistics prevents an accurate appreciation of the actual strength of the movement. In a letter to the writer, M. Camille Huysmans, Secretary of the International Socialist Bureau, states that he considers the estimate is somewhat too high, and that some associations here counted as Trade Unions should not have been so classed, as their activities lie rather in the direction of Friendly Societies than of associations of workmen whose primary object is to maintain or raise the level of wages.

In the Appendix, p. 565, is given a table showing the distribution of the members over various trades, and distinguishing between the Catholic, Socialist, and other Unions. It is there shown that nearly a third of the Trade Unionists are miners (of whom about 60 per cent are organised) and nearly 20 per cent belong to textile trades. Three-fourths of the women Trade Unionists are textile workers; they are in the same unions as the men.

workers were organised,¹ so that numerically Belgium is not now very far behind. But it would be a mistake to infer from these figures that the actual strength of the movement is almost equal in the two countries; for in Belgium several factors are at work which prevent Trade Unions from producing an effect proportionate to their numerical strength. First may be mentioned their serious lack of co-ordination. Each locality has its own society, which concerns itself only with matters of local interest and which remains entirely independent. It organises strikes without any reference to unions belonging to the same trade in other localities, and without having any claim upon them for financial aid.²

Fortunately for the success of the movement, this unchecked local autonomy, which has been such a source of weakness, is now beginning to give way to effective national federation.

In the second place trade unionism in Belgium is handicapped by the admission into the movement of denominational considerations, and of political ones to an extent and in a form unknown in Britain. It has to face the fact that Catholics, Liberals, and Socialists do not unite for any purpose whatever; and this lack of unity is a serious drawback. It is clear that if, in any town, there are three or four hundred workers belonging to one trade, their organised strength is much less if they split up into two or three different unions than if they combine in one.³

¹ Working for employers (groups 6 and 9 to 22 of Census of Occupations). For Ireland the number of persons engaged in industrial occupations "working for employers" is not stated separately in the census returns, and has been assumed to be in the same proportion as in England and Wales, namely, 78 per cent. It is assumed that the industrial population has increased from 1901 to 1906 at the same rate as the total population of the United Kingdom, namely, by about 6 per cent.

² In most of the Unions there has, for years, been a nominal federation, but the central association has no funds from which to pay either strike pay or out-of-work benefit, as the average subscriptions to it vary from ¾d. to 1d. a year per member. Hence it has no actual control over local societies.

³ In 1909 about 72 per cent of the organised workers belonged to Socialist and Militant, and 21 per cent to Catholic Unions. The remainder were members of Liberal, Neutral, or other societies. By "militant" unions is here meant all those "which recognise the principle of a class war." (See Appendix, p. 566.)

But not only is there a lack of combination, there is sometimes active opposition between unions in the same trade but belonging to different political or religious parties. Moreover, political considerations are too often predominant in determining trade union policy.

A third source of weakness is poverty. In the past $\frac{1}{2}$ d. or 1d. a week, and sometimes even 1d. a month, was all that the members of Belgian Trade Unions subscribed. Now, however, subscriptions are being considerably increased, and $2\frac{1}{2}$ d. a week is the usual minimum. The strength of the movement may be expected to grow with its resources, but the local and denominational independence of the different societies will, so long as it lasts, result in financial weakness. This is increased by the fact that many workers who join when a trade crisis is impending are unwilling to continue their subscriptions when the danger is over. In view of the low rate of wages, this is not surprising, but it is none the less disastrous to the Trade Union movement. During the last few years in Antwerp the number of organised dockers varied within a few months from 7000 to 300, that of organised bricklayers from 1500 to 100, and metal-workers from 1500 to 700. Men can be induced to join when some question vitally affecting their interests is at stake, but as soon as it is settled they drop out of the ranks again.

And yet a fourth handicap is the great lack of education in the working classes. It is only thirteen years since the first paid secretary of a Trade Union was appointed, and at the present time there are probably not more than fifty of them. But it has been very hard to fill these posts with men who combined zeal and devotion with an education adequate to the many and varied demands upon them. Certainly, the Unions might have found more highly-educated secretaries outside their own ranks, but they would not have been in contact with the actual life of the workers. And while some Unions are thus suffering through their inability to find suitable secretaries, all of them suffer through the low standard of education among the rank and file which makes organisation so difficult.

Once again, the promoters of Trade Unions in Belgium have to overcome certain racial tendencies. They have to rouse the Fleming from his natural apathy, and to curb the Walloon, whose excitability leads him to rush blindly into a fray, and weaken his own cause by enthusiastic advocacy of impossible claims.

All these causes, namely, the local, political, and denominational isolation of the individual unions, their financial weakness, the low standard of education in the country, and the temperaments of the workers, explain the ineffectiveness of Trade Unionism in the past. How weak it has been may be judged by the results of strikes which have been undertaken. In 1907, out of 45,000 workers who struck, only 6910 or 15·4 per cent succeeded in enforcing their demands, and in 1908 they were even less successful; out of 14,100 strikers, only 475, or 3·4 per cent, brought their strikes to successful issues.¹ In both these years, however, a number of the disputes which led to strikes were settled by compromise.² But conditions are gradually changing, the disadvantages under which Trade Unionism has laboured are disappearing, and there are signs that in the near future it will become far stronger in Belgium.

¹ It should be noted that, according to the Trade Union leaders, these official figures understate the actual victories of the workers.

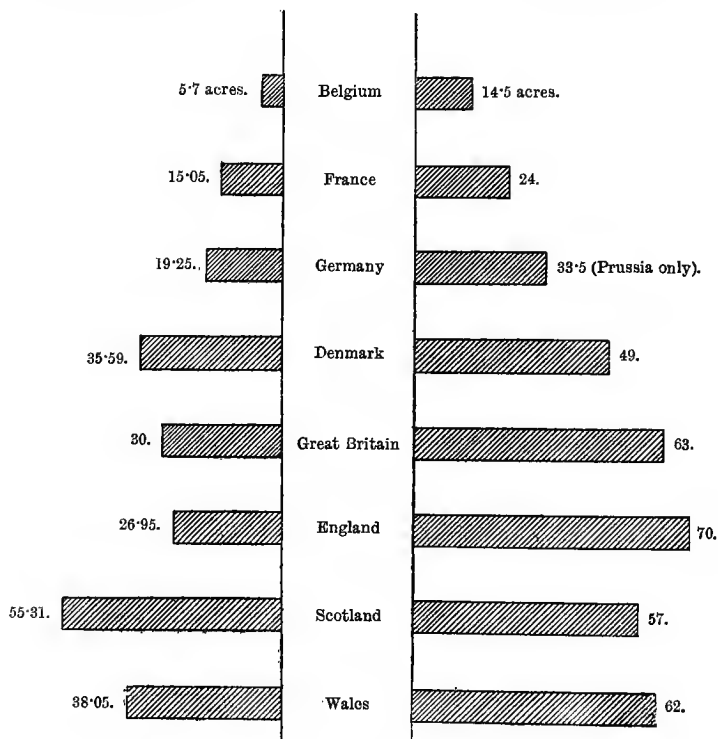
² In 1907, 45 per cent, and in 1908, 51 per cent of the strikers returned to work when the dispute had been thus settled by compromise.

PART III
AGRICULTURAL

AVERAGE SIZE OF AGRICULTURAL HOLDINGS IN DIFFERENT COUNTRIES

Including holdings of less than one acre.

Excluding holdings of less than one acre.



CHAPTER IX

BELGIUM: A COUNTRY OF SMALL HOLDINGS¹

AFTER the brief survey of industrial conditions given in the preceding section, the reader is asked to "return to the land."

The average size of the holdings in Belgium is smaller than in any other country of Europe, over 94 per cent of the total number being less than 25 acres in extent, while two-thirds are under $2\frac{1}{2}$ acres. The number of holdings increased by 45 per cent between 1846 and 1895 (from 572,550 to 829,625²), the population of the country increasing in the same period in almost exactly the same ratio (48 per cent). It is interesting that the holdings of under $2\frac{1}{2}$ acres increased by 71 per cent, and the larger ones only by 12 per cent. Since 1895 there has been an actual decrease in those of more than 125 acres in extent.³ Thus we see that there is a steady and continuous movement towards a still further reduction in the average size of a holding, in spite of there being already a quite unusual amount of subdivision of the land.

Excluding those of less than one acre, the average size

¹ The word "holding" used in this chapter is employed as the best English translation of the word "exploitation." It is intended to cover all land used for agricultural purposes, whether a large farm or a small plot, whether cultivated by the owner or let to a tenant. As pointed out later in the chapter, one "holding" often consists of many separate plots.

² There has been no complete agricultural census since 1895, but from 1900 onwards censuses have been made annually which show the number of holdings of more than $2\frac{1}{2}$ acres in extent. It is noticeable that the number of holdings of from $2\frac{1}{2}$ to $12\frac{1}{2}$ acres has increased by 9 per cent between 1901 and 1906 (from 188,321 to 204,962).

³ A table is given in the Appendix, p. 567, showing in detail the number of holdings of different sizes at various dates.

of a holding in Great Britain is about 63 acres;¹ in Belgium it is only 14½. Denmark comes next to Great Britain with an average of 49 acres, then come Prussia and France, with 33½ and 24 acres respectively. These figures speak for themselves. France and Denmark are usually regarded as countries of small holders, but in France the average size is nearly twice that of the Belgian holding, in Denmark it is more than three times, and in Great Britain it is 4½ times as large.²

Holdings of less than one acre in extent were excluded from the above statistics, so as to confine the figures to *bona fide* agricultural holdings, but it is well known that Belgium has gone further than any other country in supplying her working-class population with gardens, which are usually well cultivated, and planted with a great variety of crops, providing a welcome addition to the family dietary, and often a substantial contribution to the family income. The possession of these gardens, so highly prized by the working-class population, is rendered possible by the system of cheap railway tickets, which enable men to live at some distance from their work in districts where land is comparatively cheap.

¹ The average size for England alone is 70 acres, for Wales 57 acres, and for Scotland 62 acres.

² The figure for Great Britain is for 1905 (see *Report on the Decline in the Agricultural Population*, Cd. 3273).

„	„	Belgium	„	1905 (see <i>Recensement Agricole</i> , 1905).
„	„	Denmark	„	1901 (see <i>Statistik Aarbog</i> , 1901).
„	„	Prussia	„	1895 (see <i>Statistisches Jahrbuch</i> , 1905).
„	„	France	„	1892 (see <i>Statistique Agricole</i> , 1892).

It is difficult to make accurate comparisons between the average sizes of agricultural holdings in different countries. In the French official statistics, for instance, woods are included in the cultivable area, and to make comparison with the other countries possible, an estimated number of holdings had to be subtracted from the total to allow for these. The Danish average excludes holdings of less than one and a third acres.

Unfortunately, also the classifications are different, and do not admit of accurate comparison. In the English returns, for example, there are only four groups varying from one acre to five, five to fifty, fifty to three hundred, and over three hundred acres.

The writer has carefully considered the estimate of the average size of holding for each country, and although an absolutely accurate comparison cannot be given, he believes this one to be substantially correct.

It is seen, therefore, that Belgium has done more to subdivide her land than any other country. It is a striking fact, too, that the inclusion of the smallest plots, those which are merely *parcelleaire*, reduces the average size of the Belgian agricultural holding by over 50 per cent, a result to be expected in a country where 56 per cent of all the holdings are one acre or less. The inclusion of plots of less than one acre decreases the average size of the British holding by more than one-half.¹

If, instead of considering the number of holdings, we take the area of land occupied by those of different sizes,

¹ Although it would be misleading to look upon the figures as representing the average size of *bona fide* agricultural holdings, it is interesting to note the difference made in the average size of holdings in various countries if those of less than one acre be included. The figures then come out as below:—

AVERAGE SIZE OF ALL AGRICULTURAL HOLDINGS IN ACRES					
Denmark	.	.	(1901)	.	35·59
Great Britain	.	.	(1905)	.	30·00
England	.	.	(1905)	.	26·95
Wales	.	.	(1905)	.	38·05
Scotland	.	.	(1905)	.	55·31 ^(a)
Germany	.	.	(1895)	.	19·25
Prussia	.	.	(1895)	.	21·25
France	.	.	(1892)	.	15·05
Belgium	.	.	(1895)	.	5·7

(a) Cd. 3061, p. 42, and Cd. 8243, p. 58.

These figures have been obtained by dividing the total cultivable area of each country by the total number of holdings. This total, in the case of Great Britain, is arrived at by adding the total number of holdings of less than one acre, given in a special return for 1895, to the number of holdings of over one acre, given in the agricultural statistics for 1905.

As regards the Belgian statistics, the term *exploitation*, which we have translated "holding," is used to describe plots of land used for the definite purpose of producing crops of an appreciable money value. The smallest are often gardens attached to workmen's cottages, but the produce is destined for sale or for use in the home. Mere *jardins d'agrément* are not included.

In the Danish statistics, "holdings under one-and-a-third acres" which are excluded in the statistics on page 108, but included in the above table, are said to be little more than cottage gardens. The average size of holding in that class is only one-third of an acre, and this includes the area of the house. The same is said to apply largely to the German returns. The statistics for Great Britain include 579,133 plots of land less than one acre in area included in a special return: "These plots include areas locally recognised as allotments detached from cottages, as field gardens, or as holdings sufficiently agricultural in their nature to be differentiated from the ordinary cottage garden" (Cd. 8243, p. vi.).

we find that in Belgium no less than 40 per cent of the cultivated area is held in lots of less than 20 acres, as compared with $6\frac{1}{4}$ per cent of land thus held in Great Britain. On the other hand, the proportion of land in Great Britain devoted to farms of over 100 acres is more than four times as great as in Belgium.¹

The reasons which account for the great variations in the average size of the holdings in the different European countries are complicated, and cannot be entered into here with any attempt at fulness. They are largely historical and legislative in character. In Belgium, estates are split up by the laws of succession, which insist upon the division of property among the children or other legitimate heirs. Thus, small parcels of land are constantly placed upon the open market in consequence of the death of the owner. This fact alone, however, would not suffice to account for the smallness of agricultural holdings; a dense population demanding land is also an important factor, and this is present in the case of Belgium. Moreover, landlords are

1

SIZE OF HOLDINGS.	BELGIUM (1905).		GREAT BRITAIN (1895). ^(c)	
	Total Area.	Percentage of whole.	Total Area.	Percentage of whole.
	Acres.		Acres.	
Not exceeding about 5 acres	344,272	7·91	366,792	1·13
5 acres and not exceeding about 20	1,386,023	31·84	1,667,647	5·12
20 acres and not exceeding about 50	1,235,606	28·38	2,864,976	8·79
50 acres and not exceeding about 100	649,458	14·92	4,885,203	15·00
Above 100 acres	737,942	16·95	22,792,895	69·96

(c) Cd. 8243, pp. 3 and 58.

The figures for Great Britain refer to the year 1895 when the precise acreage of each group of holdings was last determined. In the introduction to the annual volume of Agricultural Statistics for 1905 (Cd. 3061) it is stated that although "no recent statement of the precise acreage accounted for in each group has been furnished, it appears reasonable to conclude that the proportions remain much as they were in 1895, when the area farmed in each class of holding was recorded."

fully alive to the financial advantages derivable from splitting up their farms, and are increasingly bent on securing them. In France the laws of succession are the same as in Belgium, but the population is much less dense. The fact that in England it is the custom to hand down landed estates intact to the eldest son, instead of dividing them among all the children equally, is the primary reason why the average size of farm is large. There is no compulsory breaking up of estates, and nothing to disturb the long established large farm system. It must also be remembered that the demand for small holdings has in the past remained largely latent in Britain, because the class who might have become small holders had grown accustomed to the thought that land in small quantities was not available, even if they wanted it. Recent legislation may alter this condition of things.

The relation between density of population and size of holding, is illustrated by an examination of the variation in the size of holdings in different parts of Belgium. On reference to the map on page 152, it will be seen that of the forty-one arrondissements into which Belgium is divided, the nine in which subdivision has been carried to the farthest point lie in a solid group a little to the north-west of the centre of the country. This area includes the three towns of Ghent, Brussels, and Malines. Practically the whole of this district is characterised by intensive farming; and market gardening is largely carried on in the neighbourhood of the towns.¹ The area of extreme subdivision coincides roughly with the area where the agricultural population is densest, in other words where the people have stayed on the land instead of flocking into the towns. The land is least subdivided in the south-east of Belgium (Ardennes), and in the extreme west (Furnes, Ypres, etc.), a district especially suited to extensive farming; both these areas are sparsely peopled, and there is, therefore, no possibility of that pressure of population which, as we shall see when we come

¹ The subdivision of holdings in Virton is due to special and exceptional causes.

to consider the price of land, is one of the essential factors in forcing up prices and rents.

In view of the facts set forth in this chapter, the reader may well ask whether the subdivision of farms in Belgium has been carried too far. Are not many of the holdings too small to maintain a family, or to be cultivated at all economically? When visiting agricultural districts in Belgium, the writer has made a point of closely investigating this question. Certainly, as is pointed out later in this chapter, serious disadvantages arise from the fact that individual holdings usually consist, not of one single and undivided plot of land, but of a number of plots, often separated from each other by considerable distances. There appears, however, to be no evidence that, taking all considerations into account, the division of large farms into small holdings has been carried too far, or that there is at present any fear of this. Undoubtedly, many of the holdings in Belgium, apart from those which are merely gardens cultivated by industrial workmen, are too small to maintain a family. In such cases the owner or tenant, as the case may be, only spends a part of his time upon his own plot, and at other times works for a wage, with farmers in the neighbourhood. Of course, the Belgian law which compels the division of property among the children at death tends to excessive partition; but as a matter of fact, where adherence to this law would create holdings so small as to be of little use, the children generally agree among themselves, and one of them farms the whole of the land, buying out the others, or paying them a rent for their portions, or they all farm it in partnership. There is also a tendency for men who have capital to buy up land, which counteracts the influence of the law compelling its division at death.

We now pass on to enquire what proportion of the holdings in Belgium is cultivated by tenants and owners respectively. Is Belgium a country of peasant proprietors or only of peasant cultivators? The question is soon answered. Seventy-two per cent of the total holdings are

cultivated by tenants, and only twenty-eight per cent by owners (598,306 and 231,319 respectively). Or if instead of taking the number of holdings, we take the area of land, then we find that two-thirds of the cultivable land is cultivated by tenants, and one-third by owners (3,261,287 and 1,730,722 acres respectively).¹

The proportion of tenant-farmed holdings varies considerably, according to their size; it is high, as might have been expected, among large farms, rising to 75 per cent in the case of those over 125 acres; but it is at first sight surprising to find it equally high in the case of small plots from $1\frac{1}{4}$ acres to $2\frac{1}{2}$ acres in extent. Here also three-quarters of the total number of cultivators rent, and do not own their land. It is probable that the bulk of these plots are gardens of greater or less extent attached to houses, and this fact no doubt explains the low proportion owned by the cultivators, as the land could not be acquired without buying the house also.²

It is interesting to note that a much smaller area of the Belgian soil is cultivated by owners than is the case in France, Germany, or Denmark, for while, as we have seen, only about one-third (35 per cent) is cultivated

¹ These figures refer to *cultivated* land only, and they do not include common lands. If we take the figures for all agricultural land, including woods and forests, and include common lands among that cultivated by the owners, we arrive at the following figures:—

Cultivated by owners	3,179,273 acres
" " tenants	3,261,287 "
<i>i.e.</i> 49·36 per cent by owners, 50·64 per cent by tenants. (<i>Recensement agricole</i> , 1895, p. 12).	

It frequently happens in Belgium that a man, besides cultivating his own land, rents a further portion. In cases such as this he is returned in the official statistics (from which the figures quoted in this chapter are taken) as the owner of the whole of the land which he cultivates, if the land which he actually owns amounts to more than 50 per cent of the land cultivated by him. If, on the other hand, it amounts to less than 50 per cent, he is put down as tenant of the entire area of his farm. It is probable that the effect of this method of compiling the statistics, is that the area of land shown as being cultivated by owners is below the actual fact, for there are many small farmers who have bought a little plot, but who rent the greater portion of the land they cultivate.

² For further details regarding the proportion of holdings of different sizes cultivated by owners and tenants respectively, see p. 116.

by the owners in Belgium, the proportion rises to nearly nine-tenths in Germany and Denmark (86 and 88 per cent respectively), and to nearly one-half ($47\frac{1}{2}$ per cent) in France.¹ In Great Britain, only 12 per cent of the agricultural land is cultivated by the owners.

The striking differences in the proportions of land cultivated by tenants and owners respectively are no doubt principally due to historical causes; but they also arise from differences in the average price of land in various countries. Dealing with Belgium alone, it will be noticed that there are considerable local variations in the percentage of land let to tenants. Official records show that the arrondissements where the amount of tenant farming is the highest form an unbroken group in the extreme west, whilst it is lowest in two groups of arrondissements in the Ardennes (S.E.), and in the Campine (N.E.).

The reason for the high proportion in the extreme west would appear to be that this is a region of comparatively large farms—indeed, the two arrondissements Furnes and Ypres, with their high percentage of tenant farmers, show the *lowest* percentage of subdivision in the country. On the other hand, the land which consists mainly of rich meadows is in great demand for cattle raising, and so the rents obtainable are high enough to induce landowners to let, rather than to keep the farms in hand, while as the farms are comparatively large, the tenants cannot afford to buy even if they would, and hence have to be contented with renting. In the district of extreme subdivision, although the price of land is very high, higher

¹ The figures for Belgium refer to 1895 (*Recensement général d'agriculture*).
 ,, ,, Denmark ,, 1901 ("The Development of Agriculture in Denmark," paper read by R. J. Thompson to Royal Statistical Society, May 15th 1906).
 ,, ,, Germany , 1895 (*Statistisches Jahrbuch* xxvi. p. 22).
 ,, ,, France ,, 1892 (*Statistique agricole*, p. 237).
 ,, ,, Great Britain ,, 1906 (Cd. 3281, p. 60).

generally speaking than in any other part of Belgium, the parcels of land are so small as to be more within the purchasing power of small cultivators. Hence it is not in this district of extreme subdivision that we find the highest percentage of tenant farming.¹

But why do we not find a high percentage of tenants in the Ardennes (S.E.), and the Campine (N.E.) where extensive farming predominates just as it does in Ypres and Furnes in the extreme west? The answer is that for various reasons, such as sparsity of population, inferior quality of soil, distance from market, and comparative poorness of the means of communication, the price of land is low, and consequently cultivators, even those who farm a considerable area, can afford to buy their land. Moreover, the rents are not such as to tempt the large farmers to let off portions of their farms to small peasants.

Before passing from the subject of local variations in the amount of land let to tenants, it may be pointed out that only in six of the forty-one arrondissements does the proportion of tenant farming drop below 50 per cent of the total cultivable land. In only two (Neufchateau and Arlon) does it drop below 25 per cent. On the other hand, in twenty-one arrondissements the percentage of the cultivable land farmed by tenants amounts to 70 per cent or more.

It may be asked whether the tendency in Belgium is towards an increase or decrease of tenant farming. The figures for 1895 and previous periods, show a slight rise in the proportion of land let to tenants, with a corresponding fall in that cultivated by owners. They are as follows:—

PERCENTAGE OF LAND CULTIVATED BY TENANTS

1846.	1856.	1866.	1895.
65·78	65·68	67·32	68·89

¹ This is a region of small *bona fide* farms of over $2\frac{1}{2}$ acres in extent. The very small plots of land of less than $2\frac{1}{2}$ acres, which, as already explained, are really gardens attached to workmen's houses, are found in great numbers in the industrial parts of Belgium, in the provinces of Hainaut and Liège.

If, instead of taking the proportion of land cultivated by owners and tenants respectively, we take the proportion of the total number of *holdings*, we find that in the same period (1846-1895) the proportion of these let to tenants rose from 65 per cent in 1846 to 72 per cent in 1895. The following table gives the percentage of holdings of different sizes cultivated by tenants in 1846 and 1895:¹

Size of Holding.	Percentage of all the Holdings of this Size which are cultivated by Tenants.	
	1846.	1895.
1 $\frac{1}{4}$ acres and under . . .	70·5	74
1 $\frac{1}{4}$ acres to 2 $\frac{1}{2}$. . .	67	75
2 $\frac{1}{2}$ " " 5 . . .	63	71·5
5 " " 7 $\frac{1}{2}$. . .	57	69
7 $\frac{1}{2}$ " " 10 . . .	54	67
10 " " 12 $\frac{1}{2}$. . .	53	65
12 $\frac{1}{2}$ " " 25 . . .	55	63
25 " " 50 . . .	57	63·5
50 " " 75 . . .	65	68
75 " " 100 . . .	65·5	71
100 " " 125 . . .	67	71·5
Over 125 acres . . .	69	75
All sizes . . .	65	72

This table shows that since 1846, the proportion of tenant farming has risen in every size of holding; and thus it is seen that although Belgium is a country of small holders,

¹ As 1895 was a year coming at the end of a period of great agricultural depression, it is probable that a number of small proprietors may have been obliged to sell their holdings to men who possessed sufficient capital to weather the crisis. These men would frequently let the land they thus acquired, and so the percentage of land let to tenants would be increased. Although no statistics are available, it is not improbable that with the increased prosperity in agriculture since 1895, has come a tendency on the part of the small cultivator to acquire land of his own. If this be so, the percentage of land let to tenants may be no greater now than in 1895, indeed it is possible that it may be slightly less. But in spite of such circumstances, which may temporarily affect matters, the figures over a long term of years show a slow tendency towards increase in the proportion of land cultivated by tenants.

it is becoming less than formerly a country of peasant proprietors. Why is the percentage of tenant farming increasing, while the subdivision of farms goes steadily forward? Does the small cultivator actually prefer the freedom of a tenant who can give up his farm at any time on short notice? Or would he rather own the land he tills, if circumstances did not prevent him from doing so? There is no doubt whatever that the latter is the case. There is a keen desire on the part of the small cultivator to own land. What stands in his way is its price, which was, upon the average, twice as high in 1908 as it was in 1846. He has to pay so much rent that, with the limited resources at his disposal, he can barely maintain a family. Moreover, even if he could scrape together enough money to buy his farm there would be nothing left to pay for stocking it. With the rising price of land, therefore, it becomes increasingly difficult for a man to be at the same time landowner and farmer.

Having found that more than two-thirds of the cultivable land of Belgium is let to tenants, and three-quarters of the smallest cultivators do not own the land they till, it may now be asked what are the relative advantages of tenancy and ownership, both from the point of view of agriculture in general and from that of the individual cultivator. It is comparatively easy to answer this question so far as it applies to the yield from the land. It is much more difficult, when we come to consider the relative advantages of the two systems from the standpoint of the agriculturist. A careful examination of the actual state of things in Belgium, in the course of which a number of persons having special knowledge were consulted, shows that land cultivated by the owners is, upon the whole, somewhat better cultivated and yields rather more, acre for acre, than land let to tenants. But the difference is not striking, especially if it be remembered that the Belgian law gives no compensation to tenants who quit their farms for any improvements they may have effected, or for unexhausted manure in the ground—and

that although this condition of things is mitigated by customs of old standing, these only obtain over one-third of the country, and only compensate for a certain class of improvements. In the remaining two-thirds of the country an outgoing tenant is entirely dependent upon the goodwill of his landlord, or upon the bargain he may be able to make with the incoming tenant.¹ The Belgian facts, at any rate, emphatically contradict Arthur Young's famous saying, "Give a man the secure possession of a bleak rock and he will turn it into a garden; give him a nine years' lease of a garden and he will convert it into a desert." On the contrary, although the Belgian law gives no compensation whatever for improvements in most districts, careful observers are only able to detect a small difference between the cultivation of freeholds and of rented land. It seems almost certain that given reasonable security of tenure and adequate compensation for improvements effected by the tenant, ownership would cease to show any advantage over tenancy from the standpoint of the cultivation of the soil.²

When we come to consider the question with a view

¹ As pointed out on p. 127, although the law gives no compensation for improvements, and there is no *legal* security of tenure in the case of the large number of farms held on yearly tenancy, still the landlords, as a class, are men who understand agriculture, and recognise that if their land is to be well cultivated the tenants must be able to rely on reaping the results of their work, and so, *in practice*, tenants enjoy a considerable measure of security of tenure.

² When farmers and others were questioned by the writer as to the relative advantages of tenancy and ownership from the point of view of the yield obtained from the land, very varied opinions were expressed. Some stated that rented land was better farmed than land owned by the cultivator, because the necessity for producing money for the rent upon a fixed day "acted as a whip," urging the tenant to make the land produce all it could, that he might be able to pay his rent and have enough over to live on. It was said that some farmers who owned their land were rather lazy. Having no rent to pay, less effort was required to maintain them in the standard of comfort to which they were accustomed, and they did not see why they should exert themselves beyond this point. But the more general opinion was, as stated above, that upon the whole land farmed by tenants was not quite so intensively treated as that cultivated by owners. The writer does not, however, remember a single instance where he was informed that there was a really striking difference in the treatment of owned and rented land.

to its effect upon the individuals rather than upon the land, the matter is more complicated. Apart from the sense of personal independence, the cultivator is chiefly concerned as an individual with the net profit of his enterprise.

Suppose an agriculturist to be possessed of a certain limited amount of capital, he may buy a small holding, thus investing the greater part of it in land, and leaving only a comparatively small sum for stocking his farm and for trading capital; or he may rent a large holding. He might, for instance, buy a 10 acre holding, or rent one of 50 acres. Obviously, he would be better off if he obtained a profit of £2 an acre from the larger holding, after paying rent and working expenses, than if he obtained a profit of £5 an acre from the smaller one, after allowing for interest on capital invested in land, and for working expenses. In the former case he would net £100 against £50 in the latter.¹

From the standpoint of the *nation* it is well that the utmost yield should be obtained from the land; but in the case cited it is to the advantage of the cultivator to farm a large area on extensive methods, rather than cultivate a small area intensively.²

Of course the position of an owner has many advantages. He is more independent than the tenant, and his financial position is more secure. The tenant is always liable to have his rent raised. If, through energy and enterprise, farmers are seen to become prosperous, their prosperity will attract men engaged in other occupations to the work of agriculture, and the competition of these new-comers to secure farms will result, as it has resulted all over Belgium, in the raising of rents. It has already been pointed out

¹ Of course the capital of the tenant is invested more speculatively than that of the landlord, and he may reasonably expect, in good years, to earn more upon it. The landowner sinks part of his capital in land, which, on account of the security of the investment, only gives a low return (3·17 per cent average for Belgium, see p. 147).

² In this argument it is assumed that the farmer cultivates the 10 acre farm more intensively than that of 50 acres, and this is, in fact, what takes place. Small holdings are more intensively cultivated than large farms.

in this volume that the rents of agricultural land were twice as high in 1908 as in 1846.

But it is important not to overestimate the advantages of ownership. Of course, if land values rise, the small owner's farm will rise in value along with the rest. But this is of no tangible benefit to him until he comes to sell. Now, as a matter of fact, the Belgian peasant is hardly ever a seller of land. On the contrary, as soon as he has saved any money, he is on the look-out for land which he can buy. When once bought, he will never voluntarily part with it, and thus, if his property increases in value, he will not himself reap the benefit of the increase. On the other hand, in his capacity as a buyer, the rising price is a disadvantage to him.¹

In many districts of Belgium at the present time, as we have seen, competition has driven the price of agricultural land up to a very high point, and a peasant who buys it, and pays cash down, has probably only amassed the money by extraordinarily hard work and unreasonably hard living. If, on the other hand, he mortgages the property, then the payment of the interest is a heavy burden.

Apart from the tendency to subdivide large farms, the greater portion of the small plots of land which come on the market do so in consequence of the Belgian law of succession. The almost invariable practice is for sons and daughters to take equal shares, making as a rule a perfectly amicable arrangement with regard to division, or farming in partnership; but when this is not the case the property is put up for public sale, and if its value has increased, the heirs reap the benefit of the increase in hard cash. If each child, however, keeps his plot instead of selling it, then the fact that the plot is worth more than when it was bought has only a potential value for him. So long as he remains an agriculturist he is almost certain to hold the land, and not to sell it. Indeed, if he is a typical peasant he will seek to

¹ The writer is, of course, aware that the increased value of his land increases the farmer's credit, and would enable him to mortgage for a higher figure, but these are indirect advantages, which are only of importance in case of emergencies.

add to it throughout his life ; for it is almost certain that the share which he inherits will not be large enough to maintain him and his family. Practically it comes to this, that rising land values are of no advantage to the Belgian peasant as an owner of land, but only benefit him as a seller of it, that is, when he ceases to be an agriculturist.¹ On the contrary, as we have seen, the high price of land tends to render the life of the peasant owner a hard one.

It is important to remember another point, viz. that many of the Belgian peasants own their houses and a little land, but not enough to live on, and are therefore obliged to rent more to make up the deficiency. In such cases the owner of the land they rent can obtain not only the full economic value of his own land, but a large part of the economic value of the land belonging to the peasant himself—for this is of little use *by itself*, being insufficient to maintain a family. It is only when more is added to it that it attains its full value, and the difference between its value alone and with other land added to it can be claimed by the owner of the land so added.

After very carefully investigating the facts upon the spot, and travelling through all the agricultural districts of Belgium in company with men of great agricultural experience, the writer feels convinced of the enormous advantage which Belgium is deriving from the subdivision of her soil among a large number of small cultivators. He feels that the advantages which ownership gives, compared with tenancy, are unimportant, if reasonable security of tenure and adequate compensation for improvements can be provided for tenants. Belgian experience shows that it would be quite possible to have a country consisting almost entirely of peasant proprietors, obliged to work unreasonably hard to maintain a comparatively low standard of comfort. We cannot hope, then, materially to improve the lot of the small agriculturist by the mere creation of a class of peasant proprietors.²

¹ See p. 153.

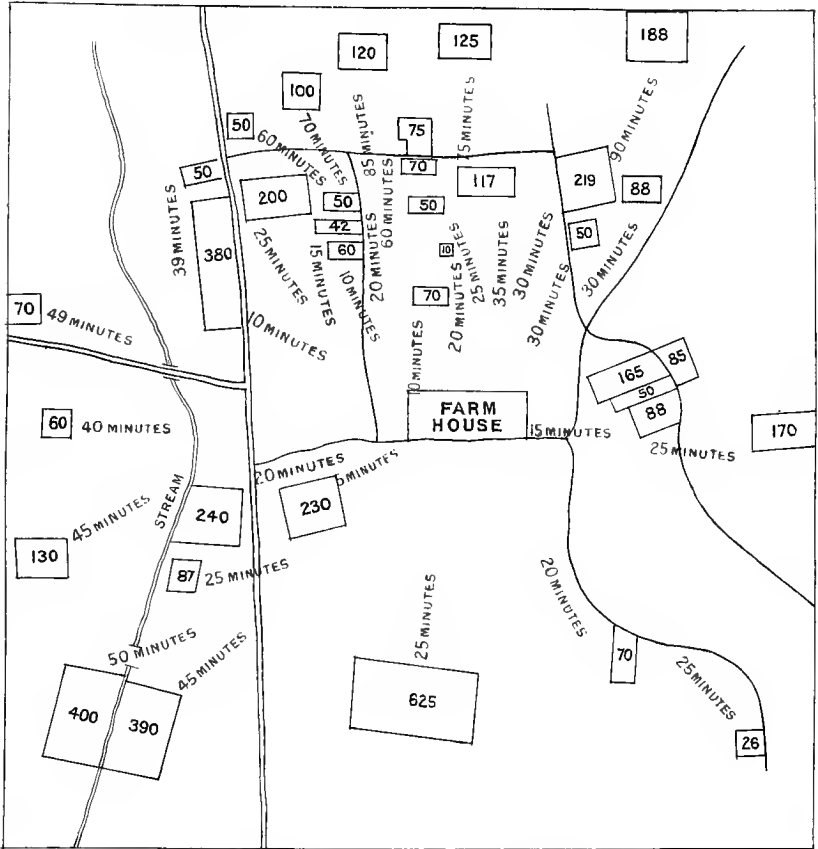
² It may be urged that unless ownership of land offered substantial advantages over tenancy, peasants would not make the great efforts which

Before concluding this chapter, attention must be given to a further question closely associated with that already discussed, viz. the extent to which holdings in Belgium are divided up into plots separated from each other.

The figures already given regarding the average size of the Belgian holdings are sufficiently striking, showing as they do that these are smaller than in any country in Europe, and less than one-quarter as large as the average holding in England. But it must not for a moment be imagined that, small as it is, this holding generally consists of one compact piece of land. On the contrary, it is the rule rather than the exception for one man to work a number of plots of land, some of them extremely small, and separated one from the other, often by very considerable distances. The two plans given opposite are typical of many thousands of farms in Belgium. The first is a plan of a farm consisting of $123\frac{1}{2}$ acres. This is divided up into 34 separate plots of land, the most remote of which is one and a half hours' walk from the farm. The largest plot consists of $15\frac{1}{2}$ acres, the smallest of less than a quarter of an acre. The 34 plots belong to no less than sixteen different proprietors. The second is a plan of a smaller farm about 28 acres in extent. This is split up into 32 separate plots, some of which are 35 minutes' walk from the farm. The largest of these plots is three acres in extent; the smallest, 478 square yards. Of course there are farms, even large ones, which are not divided up at all, but this is exceptional. Over and over again when the writer has questioned farmers as to the number of separate plots into which their farms were divided, they have thrown up their hands with an amused smile and replied, "*Ah! Monsieur, je n'ai pas d'idée.*" When pressed for a reply they would begin slowly counting the plots over, ticking them off on their fingers, and would then answer, "Perhaps between thirty

they undoubtedly do to buy it. The reply to such argument is that the peasant's desire to possess land is partly accounted for by the greater personal independence which ownership gives, but chiefly by the sentimental desire to be a land *owner*. This often induces him to pay prices which would not be paid were the matter considered solely from the money point of view.

PLAN SHOWING HOW FARMS IN BELGIUM
 ARE SPLIT UP INTO A NUMBER OF SEPARATE PLOTS.
 FARM OF 123.5 ACRES SPLIT UP INTO 34 DIFFERENT PLOTS
 RENTED FROM 16 PROPRIETORS.

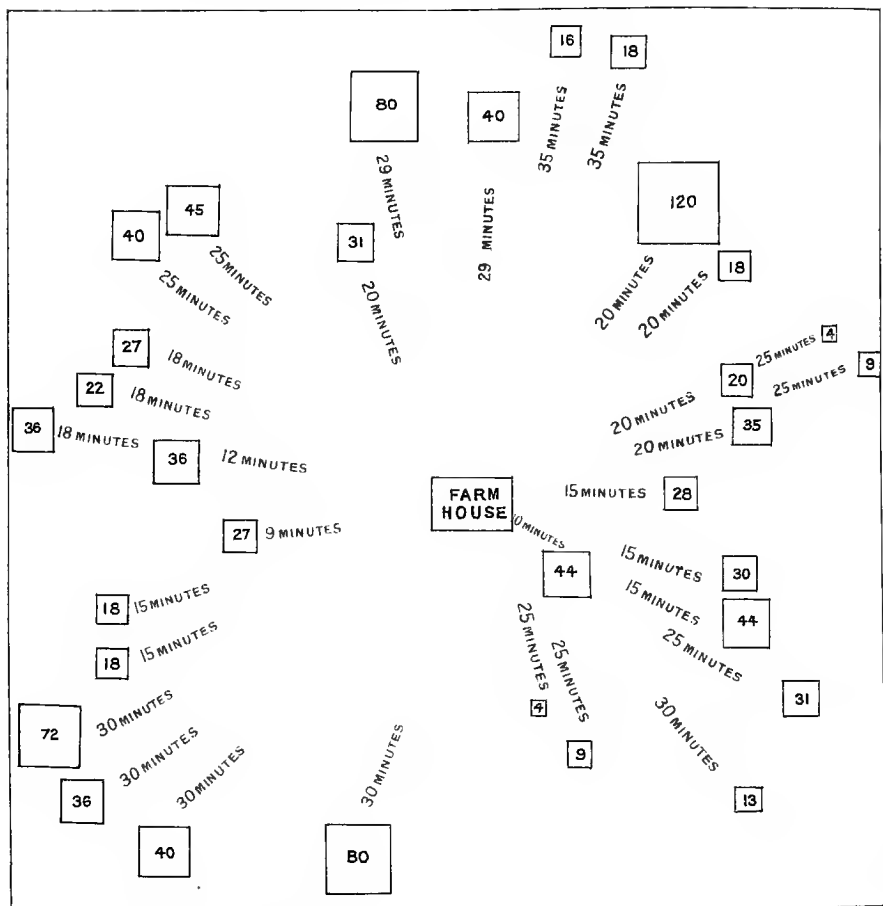


THE BLACK FIGURES REPRESENT AREAS
 1 ARES = 119.5 SQ. YDS.
 40.48 AREAS = 1 ACRE.

THE RED FIGURES REPRESENT THE TIME OCCUPIED IN WALKING
 TO EACH PLOT FROM THE FARM-HOUSE.

PLAN SHOWING HOW FARMS IN BELGIUM
ARE SPLIT UP INTO A NUMBER OF SEPARATE PLOTS.

FARM OF 28 ACRES SPLIT UP INTO 32 DIFFERENT PLOTS.



THE BLACK FIGURES REPRESENT ARES

1 ARE = 119.5 SQ. YDS.

40.48 AREAS = 1 ACRE.

THE RED FIGURES REPRESENT THE TIME OCCUPIED IN WALKING
TO EACH PLOT FROM THE FARM-HOUSE.

and forty," or "between forty and fifty." It is evident that this splitting up of farms into small separate plots is a serious disadvantage to the agriculturist. The point is so obvious that it need not be laboured, but the following extract from an address given by Baron Felicien Fallon at the National Agricultural Congress held at Namur in 1901 may be cited in this context:—

One of the gravest inconveniences of scattering agricultural estates over a wide area is that a large number of small parcels are surrounded by those belonging to other owners, and that to get to them it is necessary to cross the field of a neighbour. . . . One of the results of this bad arrangement is that all the fields situated in the same part of the area of a commune must be submitted to the same system of cultivation and to the same rotation of crops, however backward and little lucrative these may be. It is largely due to this cause that the so-called triennial rotation still survives in many districts. . . . The owner of enclosed parcels who wished to submit them to a different system of cultivation from that of his neighbours would have to run the risk of seeing his crops destroyed by flocks of sheep let loose on the fallow fields surrounding his, or have to pay high compensation for damage which he might cause to neighbouring crops by traversing them with his team and agricultural implements.

And there are other drawbacks. There is the waste of time in travelling from one plot to another, the inability to cultivate very small plots economically, and the difficulty of oversight on the part of the farmer.

Wherever there is a system of small holdings, a condition of things similar to that in Belgium will arise, for the small holder who wishes to add to his own must take land where he can. He has not the necessary capital to enable him to increase his holding largely at any one time, but if he works hard, and gets on well, he will in the course of his life make several small additions to it. But in Belgium, as in many other continental countries, the operation of the laws of succession, which insist on the division of property among the children or other legitimate heirs at death, not only leads to the splitting up of large estates into small compact plots, but to the splitting up of the individual holdings. An example will serve to illustrate this point. Suppose that a peasant owns a farm which consists of four

separate plots. On his death, this must be divided equally among his four children. It sometimes happens that the children, unable to agree among themselves, insist that each of the four plots shall be divided into four, so that each child, instead of taking one plot, takes a fourth part of every plot.

The number of small plots in a holding is often multiplied through marriage. A peasant who may have two or three plots of his own marries a girl of the village who has two or three other plots. Then it must be remembered, as pointed out in Chapter V, if any one dies without children, his property must be divided in certain proportions among his more distant relatives. Thus it frequently happens that a peasant and his wife, already farming their own little holding, divided possibly into several plots, have further plots left to them by an uncle or other connection.

The serious disadvantages arising from the subdivision of individual holdings must be set against the very real advantages which result from the laws of succession. The splitting up of large estates tends towards a more even distribution of the wealth of the country, and makes the establishment of a small holding system much easier than, for example, in Great Britain.

As for the difficulties referred to, they are great, but not insuperable. Of course the peasants, were they not generally too suspicious of each other, might voluntarily effect many convenient exchanges; but although the Government has abolished the stamp duty paid on the transference of land in the case of exchanges made by peasants, and although these probably take place more frequently than they did, they are still comparatively rare.¹

Possibly, in Belgium, it may become necessary in the future to introduce legislation similar to that which has been so successfully applied in Germany, where rearrangement of the land in a commune becomes compulsory if two-thirds of the farmers desire it. In such cases the distribution is arranged by Government officials, opportunity

¹ See p. 64.

being given for any peasant whose land is affected to state his objections to the proposed rearrangement.¹

¹ A gentleman who has studied this system in the Rhine provinces informs the writer that the prosperity of communes which have redistributed their land is markedly greater than that of others which have not done so. As a rule, the opponents of the Government scheme for redistribution are the larger peasants, who maintain that the adjudicators are too favourably inclined towards the interests of the small holders. As a matter of fact, some account is generally taken of the size of the holdings of the different owners between whom an arrangement is made, and the small holder who has no horses, for instance, gets his land allocated to him nearer his farm than the man who has many horses and to whom the distance of part of his estate represents less of a hardship.

CHAPTER X

METHODS OF LETTING LAND

SINCE, as has been stated, nearly three-quarters of the farms in Belgium, comprising 3,260,000 acres, or two-thirds of the total cultivable area, are in the hands of tenants, some enquiry must be made into the national methods of letting land.

With small and unimportant exceptions, land in Belgium is let either on annual tenancy or on a nine years' lease, with the option for either party to break such lease at the end of each triennial period. In the case of land taken by the year, it frequently happens that no written agreement is made, and often the same family will continue to hold a farm from year to year for long terms of years, sometimes for generations, with no written agreement. Often, also, a tenant, on the expiration of a nine years' lease, continues to take the land upon the terms set forth in the lease, but with no written agreement to that effect. Leases of fifteen and eighteen years are sometimes granted, but these are exceptional. In past times, long leases (*emphytéoses*) varying in length from twenty-seven to ninety-nine years were often granted, and the security of tenure which they afforded has no doubt induced tenants to bring under cultivation some of the worst land in Belgium, which probably would not have been cultivated under a short lease system. At the present time, however, the granting of emphyteutic leases has considerably diminished, although they are found sporadically all over

Belgium, and notably in the Dunes and the Campine, where the soil is exceedingly poor.

A few holdings are still let on the metayer system in the Polders region and in the Condroz. As a rule the tenant (metayer) provides all labour, and if artificial manure is required pays half its cost, the landlord paying the other half. The metayer has also to pay the whole cost of seed necessary for his farm, except in the case of flax, the expenditure on which is shared equally by landlord and tenant. When the harvest is ready the crops are sold standing and the proceeds divided equally. The few instances in which some form of metayage still obtains form an interesting relic of a system at one time more widespread. It did not, however, at any time prevail in Belgium to the same extent as in countries such as France and especially Italy, and it is now quite an insignificant factor in Belgian agriculture.

A more detailed consideration of the terms upon which land is let at the present time shows the outstanding fact that in no part of Belgium does the law give any compensation for improvements to the tenant who quits his farm. The law simply says that the tenant must cultivate *en bon père de famille*. If he improves the farm he only does, in the eyes of the law, what he ought to do, but if the farm deteriorates under his tenancy the law steps in to aid the landowner. The tenant is responsible for all damage which results from bad farming; he must not, for example, allow noxious weeds to overspread the land, nor farm it so as to impoverish the soil. If he ploughs up permanent pasture or transforms arable land into pasture, he renders himself liable to pay damages. The outgoing tenant must leave behind all the straw and manure of the year if he received them without payment on entering, but if he had to pay for them, the landlord takes them at a valuation.¹

¹ The legal Code speaks of "straw and manure," but lawyers are in great disagreement with regard to manure which has already been spread on the land, and with regard to the payment which the outgoing tenant is to receive for sowing and ploughing. Some courts hold that a farmer cannot

But although the law gives no right to compensation, there are in parts of the country ancient usages which practically enforce its payment for a certain class of improvements. Many of these customs date back for centuries, and as in the district where they obtain, land is always let "subject to customary usages," they virtually have the force of laws, through which compensation can be legally demanded. This is the case, however, over only about one-third of Belgium, namely, in a great part of East and West Flanders, part of the provinces of Antwerp and Brabant, and the district round Tournai, and even there it is only with regard to improvements due to manure. The breaking up of cultivated land, the planting of orchards, drainage, and irrigation, the improvement of land by removing noxious weeds such as thistles, and the levelling of uneven ground are all labour equally unproductive of any return to the outgoing tenant.¹ In the remaining two-thirds of the country no compensation, either legal or customary, is paid. Of course if a farmer takes a farm in very bad condition, he gets what may be regarded as the equivalent to compensation for improving it, even in the absence of either law or custom, for either he will only take it at a low rental or he insists upon remission of rent for a year or more. This is, however, a question of individual bargaining between the landlord and the prospective tenant.

The absence of adequate compensation for improvements undoubtedly tends in many cases to check the intensive claim for manure which has been spread on the soil, while others maintain that he can claim for this, as well as for the manure which has not yet been spread. In the case of crops which will be reaped by the incoming tenant, the amount allowed by the court for sowing and working the land is very uncertain. Some courts allow much more than others; the fact being that in the absence of any special law or custom which regulates matters of this kind, each judge bases his decisions on what he considers to be the equity of the individual case, hence there is infinite opportunity for differences of opinion and treatment, modified to a certain extent by the effort of judges in inferior courts to give judgment which they think will be in accord with the decision of the superior court to which the matter is always liable to be referred on appeal.

¹ Thatch on holdings is, by custom, paid for at a valuation by the ingoing farmer to the outgoing farmer.

cultivation of the soil. A Belgian agricultural authority says, when writing about the nine years' leases in districts where no custom obtains, "The first three years of the lease are devoted to getting the land into condition again. The three following yield good crops, and then from the seventh year the tenants have only one purpose:—to exhaust the soil as much as possible."¹ But in the present writer's opinion this statement, although true in certain cases, is too sweeping in character. No doubt in the absence of adequate compensation for improvements, there is always serious risk that a tenant will "farm to leave," that is to say, that in the last year or two of his tenancy, so far from improving his farm, he will exhaust it; but farms in Belgium do not often change hands, and the absence of compensation to outgoing tenants will not seriously influence the farmer's actions unless he expects either voluntarily or perforce to leave his farm.

The relation existing between landlord and tenant in Belgium is, as a rule, a friendly one. The tenant seldom opposes the wishes of his landlord, either in political or religious matters, and though sometimes this is due to fear of the consequences of such opposition, generally, and especially in the Flemish parts of the country, the views of the tenant and landlord really coincide. When this is not so, the political and religious liberty allowed to the occupier is usually very limited, and Belgium is not without her examples of serious oppression by those whose ownership of land gives them the power to enforce their own political views on their dependents. In the Flemish districts almost the whole rural population is Catholic; and the lot of a tenant holding and expressing Liberal or Socialist opinions is certainly not enviable.

A fact which operates in favour of the tenant is that the landlords themselves are usually men with a true farming instinct, who recognise that a certain amount of security of tenure is necessary if their tenants are to

¹ *Monographie Agricole de la Région Limoneuse et Sablo-Limoneuse*, 1901, p. 265.

succeed, and who wish them to be successful. Thus, although under the law conditions are almost as bad as they can be, so far as compensation for improvements is concerned, in practice, the consequences are less serious than might be supposed. There is, however, no doubt that if the law gave adequate compensation for improvements effected by the tenant, an impetus would be given to high farming which is at present lacking.

This chapter must not close without reference to the interesting customs which exist in the *Région du Mauvais Gré*. This is a comparatively small region with clearly defined boundaries, situated in the centre of Belgium. It does not form part of that district referred to above, in which compensation for improvements is regulated by ancient customs. In the *Région du Mauvais Gré* compensation for improvements effected by the last tenant is expected from the incoming tenant. If he will not make the required payment the demand cannot be enforced in a Law Court, but he will be boycotted by all his neighbours, and mysterious damage will be done to his cattle and other property till he complies. The writer was told of an interesting case which actually occurred in this region.

A landlord, resident in Brussels, owned a fine farm on the borders of Flanders. His tenant on giving him some trouble received notice to quit, and, moreover, an intimation of the fact that no compensation would be paid him by the incoming tenant. Not a farmer would take up land from such a landlord, in spite of the fact that it was in excellent condition. So, rather than let it go to waste, its owner put in a steward to cultivate the farm. Good crops were soon raised, and they were publicly offered for sale, but no offers were forthcoming. The villagers preferred to see the harvest rot in the ground! The landlord, nothing daunted, went to Flanders, and managed to find a farmer there who bought the standing harvest at a cheap rate, and from whom, being now thoroughly awakened to the strength of local opinion, he wisely obtained cash down. But when the purchaser arrived to get in his crop not a labourer

in the place would work for him! He had to bring men over from his own district, and he managed to arrange for their accommodation with an innkeeper, who warned him, however, that unexpected things happened on farms that were *en mauvais gré*, or boycotted. But the rash man would not be warned, and he prepared to start harvesting the next morning. Alas; when he arrived on the spot he found the harvest utterly destroyed!

What had passed in the night was never revealed. The magistrates made careful inquiry in order to discover the authors of an outrage so odious to the rights of property, but eyes and mouths alike were closed. It was only certain that three heavy teams with harrows and rollers had passed back and forth over the fields during the night till everything was ruined! To whom did they belong? To different owners certainly, for no single farmer in the neighbourhood could have furnished three such fine teams.

Some time after this incident the proprietor died, and his heir, understanding the whole situation, reverted to customary methods. The outgoing farmer received his compensation, and all difficulty was ended.

Actions of *mauvais gré* are rarely pushed to such extremes as in this case, but the complicity of the whole village is characteristic of them. Every inhabitant knows all that is going on, but not a soul will reveal it to a stranger, much less to a magistrate.

Summarising in a few words the whole question of compensation for improvements in Belgium, we find that by law no such compensation can be claimed; but by custom, which through public opinion has come to have the force of law, compensation is paid to outgoing tenants in a region comprising about one-third of the country. It covers, however, only a certain class of improvements. The absence in the rest of the country of any system of adequate compensation for improvements to outgoing tenants has a discouraging effect upon agriculture. This is, however, somewhat minimised by the infrequency of changes in

tenancy, and by the fact that the majority of the landlords are men who understand farming, and who recognise that tenants must feel a measure of security if they are to farm well.

It is not easy to compare the conditions of tenure in Belgium with those in England, as the fundamental principle of compensation for improvements varies in the two countries, and also because in Belgium written leases are made use of to a much smaller extent. But on comparing the typical agreements given in the Belgian Agricultural Monographies of 1900 with those current in Yorkshire, it appears that, apart from questions of compensation, the English leases are slightly more in favour of the tenant than is the case in Belgium. It must, however, be borne in mind that in neither country are the terms of a lease strictly adhered to under ordinary circumstances, and therefore too much emphasis must not be placed upon differences which may be more apparent than real.¹

¹ As a typical instance of Belgian leases, the principal clauses of an agreement made with one of the largest landowners in Flanders are given in the Appendix, p. 568, together with the remarks on them by an English solicitor who has had much experience in matters affecting agricultural leases.

CHAPTER XI

THE COMMON LANDS OF BELGIUM

THE last chapter was confined to a discussion of the conditions under which private owners let their land. But there is in Belgium a large area of land belonging to the communes, and before passing to other matters we must consider the conditions under which it may be used by individual cultivators.

It is sometimes asserted that the differences in the social well-being of the people in various parts of Belgium largely depend upon the presence or absence of common lands; that communes, having a large amount of these, are more prosperous than others which have little or none. It is important to ascertain how far this is the case.

Curiously enough, no statistics exist which show the total area of land held in this manner. All that can be learned from the official statistics is how much forest and how much waste land is owned by the communes, while of the constantly increasing area of common lands let to common-right owners and cultivated by them there is no record. As stated in Chapter IV., however, the writer himself has obtained information which fills this curious gap in the otherwise carefully compiled statistics of the Belgian Government. The result of this investigation shows that about 51,870 acres are thus held. It is therefore now possible to state the total area of land belonging to the communes in Belgium, namely:—

	Acres.
Under woods and forests (31st December 1905) ¹	411,603
Uncultivated (31st December 1905) ²	115,597
Cultivated	51,870
	<hr/>
	579,070
	<hr/> <hr/>

This total is equal to about 8 per cent of the total area of the country.³ Practically the whole of the common land of Belgium is found in the regions of the Campine and the Ardennes.

Most of the present titles to ownership have their origin in the ancient rights acquired by use. In the cases of rich pasture and woodlands these were often lost in the course of centuries, but the rights over swamps and heaths usually remained undisputed. In the early days of feudalism, when population was very sparse, the overlords had difficulty in obtaining sufficient labour for their fields and forests, and in order to attract and retain labourers they gave holdings to all who would come and settle on their domains. They also acknowledged the right of the settlers to cut wood in the forests, both for fuel and for the construction of houses and agricultural implements, and to make use of heath lands for pasturage. The areas over which those rights were exercised were at first ill-defined, and only when the interests of one commune encroached upon those of another were definite boundaries established. Sometimes intercommunal rights of pasture were agreed upon. In the course of time, as land became

¹ See *Annuaire Statistique* for 1906, p. 299.

² Including uncultivated land belonging to public authorities (see *Annuaire Statistique* for 1906, p. 299).

³ Of all uncultivated land in the country in 1895, the State owned 4 per cent (16,937 acres), and the communes 34 per cent (142,025 acres). In addition the State owned about 5 per cent (61,851 acres) and the communes 30 per cent (390,710 acres) of the total area under forests. Of the State-owned uncultivated land, 3223 acres consisted of alluvial wastes at the estuary of the Scheldt, 1102 of sand dunes on the Flemish coast, 2964 acres of bog-land—some of it recently afforested—in the Ardennes, and 9193 acres of heath used for military encampments in Limbourg. Since 1895 the area of forest land belonging to the State and the communes has increased, as shown in the table given above, but complete statistics cannot be given later than 1895, as no recent figures are available showing the area of State-owned uncultivated land.

more valuable it was often necessary to resort to litigation in order to define exactly the respective rights of the overlords and of the common-right holders.

Some of the communes acquired their property in the years following the French Revolution, when the State sold to them land which had been taken from the nobility.

A century ago common lands were much more extensive than they are to-day, but in the early years of the nineteenth century enormous areas were sold for next to nothing, or even given away by the local authorities, under the conviction that land could only be profitably employed if privately owned. This conviction was shared by the Government, which in the forties strongly pressed the policy of alienation. As stated on p. 34, an Act was passed in 1847, after a year of great agricultural distress, for the purpose of bringing more land under cultivation by the clearance of woods and the alienation of common lands. As a result, many of the communes, sometimes willingly, with a view to immediate gain, and sometimes under pressure from the Government, sold their lands.¹

In the Campine there was a strong objection to the sale of the common lands, for although they brought in very little, the people appreciated the privilege of cutting peat and rough litter for their cattle. Even if these were of poor quality, they cost nothing. But the Government practically forced them to carry out its policy of alienation, and great areas of common land were sold to speculating companies, which were induced to purchase by the Government's promise to construct canals and means of communication and thus open up the districts. In the Ardennes, on the other hand, the people, tempted by the prospect of a large supply of ready cash, were in most cases only too ready to carry out the wishes of the Government. The proceeds of the sales were often meagre enough, and were

¹ The great immediate effect of the Government order is shown by the following figures :—In the year 1847 the total area of waste common lands in Belgium was 402,353 acres ; of these, 198,003 were in the provinces of Antwerp and Limbourg. Only thirteen years later (1860), 55,577 acres had been alienated in these two provinces alone.

soon spent by the communes, many of which bitterly regretted their rash action when they saw the land they sold for next to nothing increasing steadily in value. At Martelange the price realised by the commune was eleven or thirteen pounds an acre, for land which fetched eighty pounds an acre at a recent sale. The most striking case, however, of this unwise policy of alienation is that of the commune of Han-sur-Lesse, which sixty years ago sold a limestone ridge, covered with heath, for £1200. Subsequently the famous caves of Han were discovered under this ridge, and they bring in to their fortunate owners about £10,000 a year. So wonderful are they that an entrance fee of no less than 6s. 4d. (8 francs) is charged for admittance.

Sometimes communes disposed of their land to raise funds for the erection of a church or other public building. In such cases they were guilty not only of lack of foresight but of injustice to the poorer inhabitants; since each householder who had resided in the commune for a year and a day had, whether rich or poor, the same share in the common land, and its alienation really meant an equal levy upon all of them for the object in view. Some communes, instead of selling their lands, divided them equally among the common-right owners. In the provinces of Namur, Liège, and Luxembourg many communes have thus periodically divided parts of their property among the inhabitants, or sold them in small allotments. This has proved to be a singularly unfortunate policy, for the plot of land given to each inhabitant was so small—often only a quarter or three-eighths of an acre, and seldom more than one and a quarter acres—and so far distant from the village centre that it was not worth while to cultivate it. The holding was therefore abandoned to rough pasture, or perhaps sold after a few years at an extremely low price to some farmer in good circumstances. As a rule the latter class is the only one which can be said to have profited by the sale or division of common lands among the inhabitants. Many big estates in Belgium, now chiefly covered with

forests, have thus been created at the expense of the communes.

Fortunately the Government has realised the folly of the course so strongly advocated in the middle of last century, and now, so far from encouraging the communes to alienate their common lands, has made regulations which render this extremely difficult. Alienation has therefore become practically a thing of the past.

The land which remains to the communes at the present time is mainly poor in quality, and often situated at a great distance from the village to which it belongs. Owing to the educational work of the Government Forestry Department, much of it is being afforested. A certain amount is still used as pasture land, each common-right holder being entitled to graze a certain amount of stock either free or for a small payment. But most of the land which is not afforested is divided up and let out to the common-right holders for a term of years; sometimes no rent is charged, sometimes merely a nominal rent, and sometimes a rack rent. When letting the land the condition is often made that it shall be brought under cultivation within a certain number of years. After this has been done, the communes can demand a much higher rent at the expiry of existing leases. Some of them are fortunate in possessing quarries of stone and slate or large deposits of peat. The finest razor hones in the world come from the land belonging to the commune of Bihain. A little company of working men pays a royalty of sixty pounds a year to the commune for the privilege of extracting the stone from which these are manufactured; and, in addition, a quarter of the stone extracted must be shared equally among the common-right holders. In this village a common right is worth about sixteen pounds a year.

Turning now to the effect of common lands on the well-being of the people, there are certain questions to which answers must be given: How does the yield per acre obtained from common lands compare with that obtained from similar land held privately? What is the effect of

the presence of common land upon the rent of other land in the district? Do the common lands serve to check the rural exodus?

The question whether the yield per acre from common lands is inferior to that from lands held privately depends primarily upon the conditions under which the holdings are occupied. It has been shown that these conditions vary from commune to commune. In those localities where every householder has a plot allotted to him for a term of years without payment, or for a nominal sum, it is not rare for the land to be almost entirely wasted, especially if, as often occurs, it is situated at a distance. Once a year the broom and other growths are cut for litter and carted down to the farmer's stables, the resultant manure being spread, not upon the common land, but upon the farmer's own land. In this way, of course, the quality of the common land steadily deteriorates. In one commune, for instance, the land, originally poor, has become impoverished to such an extent that the crop of rough hay sold standing fetches only about two pence an acre! In the Campine, not only do common-right holders cut down everything that will serve for litter, but they actually pare off the surface soil to be used as fuel! They also go into the woods and take away all fallen leaves to use for manure and litter, thus steadily exhausting the soil. Fortunately, however, such abuses are less common than they were; the Government and forest experts do all they can to encourage proper management, and with a widening knowledge of agricultural science, and increasing intelligence on the part of the people, such deplorable waste should soon be a thing of the past.

But misuse of even awkwardly situated land is not the invariable rule. Sometimes the common-right holders sublet distant plots to cultivators who live near them. Sometimes, too, they succeed in cultivating distant plots, doing the work themselves by using chemical manure, which is much more easily transported than farmyard dung.

Of course, where a common-right owner, instead of getting the land rent free or for a nominal sum, pays a substantial rent for it, he cultivates it as he would any private land he might rent.

Where common land is afforested and not cultivated, there is no doubt that the forests are generally better managed than those which are privately owned, for they profit by the skilled supervision given by the State Forestry Department. Upon the whole, remembering that the greater part of these lands is naturally of poor quality, we may assume that their total produce is not materially less than if they were held by private owners and let to tenants.

The effect of common lands upon land values generally, in the commune which owns them, is two-fold. First, wherever there is a demand for land, they tend to raise rents and prices. The privilege of using a certain portion of them, which can be claimed by householders, puts a premium on residence in that commune, and enables private landowners to sell land within its boundaries more dearly, or to demand more rent. Thus the householder pays for his privilege. On the other hand, the existence of common land in a commune will, in so far as it satisfies a portion of the demand for land, decrease the extent of the demand for privately owned land. The effect of this will, of course, be to depress the price of the latter.

Which of these two influences proves the stronger will depend upon circumstances, that is to say, upon the extent and quality of the common land in relation to the privately owned land; and also upon the extent to which the total demand for land is satisfied by the common land.

The writer has made numerous investigations upon the spot, as to the actual effect of the communal property of Belgium upon the market price of other land. He has come to the conclusion that both in the Campine and the Ardennes, where the population is somewhat scanty, the demand for land comparatively small, and the value of the common lands to each householder not very great, the effect upon the surrounding rents is almost

nil and may be disregarded, especially as the area of common land available for cultivation has been enlarged by the discovery of chemical manures, which make possible the profitable cultivation of previously barren soil. All these factors counterbalance the tendency towards increase of rent where tenancy carries with it rights to the common lands.

Of course this is only a temporary condition. In time the waste communal land which is cultivable will all be brought under the plough, if the population increases and if the demand for land continues to grow. This process will naturally affect the market, and an increase in the cost and rent of other land will gradually result. The fact that in one commune each householder has the right, say, to an acre of common land, whereas in another he has no such right, will certainly tend to raise the rent in the former commune as compared with the latter, assuming, of course, the same relation between the demand for land and the total land supply. The extent to which the rent of privately owned land will be raised will depend upon the demand for land. Where this is great, and where the right to an acre of free land becomes an important item, the ownership of any land which gives these rights will be prized, and its price and rent will tend to rise accordingly.

Both in the Campine and in the Ardennes the general price of land, as compared with that of the rest of Belgium, is low, owing to the scanty population; and the common rights of the householders are of small importance as compared with other factors, such as the general quality of the soil, railway facilities, etc.

There is, however, in East Flanders—a district where the demand for land is intense—an interesting example of the way in which the presence of common rights materially increases the value of privately owned land to which the common rights are attached. In the fourteenth century a woman left about 3200 acres of land on the condition that it should never be built upon, and that it should be utilised for the benefit of all those who live on its borders. This

little island still exists in a district where all other common lands have long ago disappeared. But does it fulfil the purpose for which it was originally intended? A small peasant farmer living on its confines told the writer that the privilege enjoyed by himself and others of using a part of this land practically made no difference to them, since all the profit accruing from it was absorbed by increased rent.¹

The effect of common lands on rural exodus is not great. In one commune (Ocquier, in the Condroz region) the writer was informed by an intelligent peasant that every householder had the right to the use of nearly two acres of land for a rental of 6s. a year, and that a number of men wishing, though not agriculturists, to utilise this opportunity, set to work to cultivate their holdings. The knowledge they acquired in this way developed in some of them such a liking for agriculture as to induce them to add to their holdings and take it up as a profession. Had it not been for the interest and knowledge gained upon the communal plots, the peasant thought that these men would have drifted to the towns. But although, in certain cases, the presence of common lands tends to check the rural exodus, it is mainly governed by other factors, chiefly the comparative wages to be earned in town and country and the railway facilities which exist. The latter in Belgium are so good, and the workmen's tickets so cheap, that a great many men work in the towns, returning either daily or weekly, according to the distance of their work from their homes. In such cases the fact that they have rights in the

¹ Dr. Slater, in his book *The English Peasantry and the Enclosure of Common Fields*, tells (p. 10) how, in the village of Laxton, in Nottinghamshire, cottages to which a common right is attached command a rent about £2 a year higher in consequence.

Another case may be cited showing how, where the demand for land is intense, the benefit accruing from the presence of common lands goes to the owners of other land in the locality. The present writer was recently in treaty for the purchase of a piece of land. The price was settled between buyer and seller. Then the seller said: "There are rights of pasture on a common attached to this land. If you wish to make use of these and have them conveyed to you with the land, the price for the land will be increased by 10 per cent."

land unquestionably leads them to cultivate the little plot belonging to them, but not, as a rule, to give up their town occupation and take entirely to a country life.

Generally speaking, it may be said that in the Ardennes and the Campine it is at present a distinct advantage to householders to have shares in the common land. But it is certain that, if they are tenants, as population and the demand for land grow, this advantage will be neutralised by the gradual increase of rent.

There is no doubt that the social conditions in the Ardennes are in many respects better than in other districts of Belgium. On the other hand, in the Campine, where there are also large areas of common land, the social conditions are probably the worst in Belgium. The causes of this difference between the two districts otherwise similar must therefore be sought elsewhere than in the fact that both have a great deal of communal property within their borders.

CHAPTER XII

PRICE AND RENT OF LAND

SOME knowledge of land values and rents is essential to the proper study of the agricultural and social conditions of any country. Fortunately, in the case of Belgium, fairly complete official statistics are available up to 1895, and information has been gathered for this volume as to the trend of prices since that date. Of course everywhere there are great differences in land values, according to the quality and position of the land, but the average figures made use of in this chapter are sufficiently accurate to enable us to determine certain questions, such as the following: "Is agricultural land dearer than in England?" "Is the price of land increasing or decreasing?" "Does the division of land into small holdings tend to increase its price?" "Does intensive culture enable the landlord to obtain a higher rent?" "In tenant farming is it the landlord or the tenant who reaps the benefit of improved methods of cultivation, or is it reaped by both?" Such are some of the questions which may be answered from the information which will be given in this chapter.

But first it is necessary to give the sources of our information regarding land values and rents in 1908, as no official statistics of them have been published since 1895.

Through the kindness of the Ministers for Agriculture and Justice, the writer has made two separate special enquiries. One was addressed to the twenty-seven agricultural experts located in different parts of Belgium. These

officials are constantly travelling about, and in the course of their work come into daily contact with farmers. They are thus exceptionally familiar with the fluctuations of land values. Each of these State experts has kindly furnished a statement giving the average price of agricultural land in the district for which he is responsible.

A second enquiry was made by addressing forms, asking for information regarding local land values and rents, to three solicitors (*notaires*) in each of the 222 cantons into which Belgium is divided. Replies were received from more than 400 of the 666 notaries to whom enquiry forms were sent.¹ The information supplied by the notaries is particularly valuable, for no land can be bought or sold in Belgium without their instrumentality. A notary's estimate of land values is, therefore, based upon personal knowledge of prices actually paid in his locality, and great reliance may be placed upon such evidence. Having obtained the information from the notaries, it only remained to take the average of the different estimates made for each canton, and from these averages to work out the figure for the whole country.

It is interesting to compare the estimates furnished by the State agricultural experts and the notaries. According to the former, the average value of agricultural land

¹ The enquiry forms which were kindly sent out for the writer by the Minister of Justice with a covering letter, were worded as follows:—

Selling price and rent of a hectare of land of average quality, belonging to a farm of medium size (not including the price of farm or other buildings).

N.B.—In the case where the land in any one canton varies very much according to the different zones to which it belongs—sandy soil and clayey soil for instance—give two prices, indicating clearly to which part of the canton they refer.

Name of Canton

	Selling value.	Rent.
Arable land
Pasture land

Signature of Notary

in Belgium is £54:18s., per acre, while the notaries estimate the average to be £59:13s. (£66:13s. pasture, and £57:11s. arable).¹ Seeing that these estimates are entirely independent of each other, it will be admitted that they correspond closely. The writer made a great number of personal enquiries regarding land values and rents from farmers in all parts of Belgium, and these tend to confirm his belief that the figures given above may be accepted as virtually correct.

With regard to rents in 1908, only the information of the notaries is available, for the State agricultural experts were not asked to give information on this head. The notaries' returns show the average rents of agricultural land in Belgium to be 36s. 3d. per acre—42s. pasture and 34s. 4d. arable.²

The price has undergone great changes since 1830, the earliest date for which figures are available. Up to 1880, it rose steadily, almost exactly doubling in the fifty years. But then a very serious drop occurred, the price of arable land declining by no less than 33 per cent, and that of pasture land by 23 per cent, between 1880 and 1895.³

¹ As between the estimates furnished by the agricultural experts and the notaries, that of the agricultural officials is, in the nature of the case, a rougher one than that furnished by the notaries, though it is exceedingly valuable as confirmatory of the latter.

² Of course land values vary enormously in different localities. The following are the average prices and rents per acre of agricultural land, exclusive of buildings, in each of the agricultural regions.

	Pasture.		Arable.	
	Price.	Rent.	Price.	Rent.
Loamy (<i>Limoneuse</i>) . . .	£78 10 0	£2 5 7	£77 18 0	£2 6 0
Sandy { (Flanders)	65 13 0	1 17 6	70 0 0	2 0 6
{ (Campine)	49 11 0	1 10 5	41 18 0	1 2 5
Polders	95 11 0	2 16 8	63 5 0	2 4 4
Limestone (<i>Jurassique</i>). . .	41 4 0	1 7 10	31 18 0	1 4 11
Loamy-sand (<i>Sablo-Limoneuse</i>)	59 11 0	2 4 8	56 17 0	1 16 7
Ardennes	51 8 0	2 0 6	30 2 0	0 19 1
Condroz	51 13 0	1 15 0	34 1 0	1 0 9

³ The actual figures are given in the following table. They refer to land which is purely agricultural, and not to building land. Of course they are

The marked decline in price after 1880 was due to the severe crisis brought about by the reduction in the price of corn, owing to the opening up of the American corn fields, a crisis by no means confined to Belgium.¹ The drop was greatest in the case of large farms let to tenants,

but averages; there are great variations from locality to locality. It must also be borne in mind that, on account of the high cost of land transfer in Belgium, the actual *cost* of the land to a purchaser would be from 8 to 12, or even 15 per cent higher than the figures here cited (see Chapter V.).

	Price of Land per Acre.			Rent of Land per Acre.		
	£	s.	d.	£	s.	d.
1830 . . .	34	17	0	...		
1835 . . .	38	2	0	...		
1840 . . .	42	7	0	...		
1846 . . .	42	10	0	1	2	0
1850 . . .	...			1	2	8
1856 . . .	54	10	0	1	6	5
1866 . . .	66	6	0	1	15	0
1880 . . .	68	12	0	1	16	7
1895 ^(a) . . .	47	5	0	1	10	1
1908 ^(a) . . .	59	13	0	1	16	3

^(a) From 1880 distinction is made between the price and rent of arable and pasture as follows:—

	Price of Land per Acre.			Rent of Land per Acre.		
	Arable.		Pasture.	Arable.		Pasture.
	£	s.	d.	£	s.	d.
1880 . . .	69	0	0	67	0	0
1895 . . .	46	0	0	52	0	0
1908 . . .	57	11	0	66	12	0

With the exception of the figures for 1908, all the information regarding land values and rents here given has been supplied to the Government by the Burgomasters in each commune. Although the number of sources of information has therefore been greater in the case of the official figures than in that of the figures for 1908, there is little doubt that the notaries are better qualified on the average than the Burgomasters to form trustworthy opinions on the matter.

¹ Speaking of agricultural rents in England and Wales, Mr. R. J. Thompson of the Agricultural Intelligence Department, in a valuable paper published in the *Journal of the Royal Statistical Society*, December 1907, says that the average fall in rents between the early seventies and the end of the nineteenth century was approximately 30 per cent.

and least in districts where cultivating ownership prevailed, and where the holdings only sufficed to support a family. This was because the products which fell most in price were not placed on the market by the small holders, but were grown for home consumption only. On the whole, pasture land depreciated less in value than arable, the prices of live stock being less affected than those of crops.

For a time the Belgian agriculturist was hard hit, but gradually he adjusted himself to the new conditions. His cultivation became more intensive, he made more and more use of co-operation in various directions, and he devoted himself to new branches of agriculture, especially the raising of live stock and garden produce. He began to realise the value of artificial manures, and to acknowledge that science could help him. All these factors, along with improved prices for live stock and some of the other products of Belgian farms, brought back a certain amount of prosperity, but with it came a rise in rents and in the price of land, the average of which had in 1908 risen to within £8 an acre of the price in 1880, while the rents had risen practically to the 1880 level (36s. 3d. as compared with 36s. 7d.). Both prices and rents are still rising in most districts. A comparison of the average rent with the average price shows that the return obtained on present capital values is 3·17 per cent for arable land, and $3\frac{1}{4}$ per cent for pasture. Viewed from the standpoint of an investment, supposing land to have been bought at present prices, it is clear that the percentage earned upon capital is not high, especially when it is remembered that the figures refer to *gross* and not to net rental.¹

It must be remembered that in Belgium, as elsewhere, landlords frequently refrain from demanding rack rents

¹ By gross rental is meant the rental before the expenses of management and general upkeep have been deducted. In England and Wales net rental may be taken at about two-thirds of the total rental (*Journal of the Royal Statistical Society*, December 1907, p. 605). It is probable that the proportion of net to gross rental is rather higher in Belgium than in England. In the former country there are very few large estates with long traditions of somewhat lavish management, and the tendency is to put a larger share of the cost of upkeep upon the tenant than is the custom in England.

from old tenants. This, of course, affects the average rent of agricultural land throughout the country, and in part accounts for the return on capital invested in land being lower than in the case of safe industrial securities.

It is clear, from a consideration of the low returns obtained upon capital sunk in land, that other than merely commercial reasons influence buyers, for gilt-edged securities in Belgium are considerably more profitable. The "land-hunger," which undoubtedly exists there, is partly a matter of sentiment, but it is also due to the desire for that greater measure of independence which a landowner enjoys, and for his social status, as compared with that of a tenant.

It is generally accepted that the average selling price of agricultural land in England and Wales is about twenty-five pounds per acre, and the average rent about one pound.¹ Thus in Belgium the rent of agricultural land is 80 per cent higher and the price more than twice as high as in England and Wales. Indeed the difference is greater than this, for the English figures refer to land *including* the buildings upon it, while the Belgian figures are for land *without* buildings. What is the cause of this striking difference? It is not a question of the fertility of the soil, for there is little doubt but that, upon the average, the soil is naturally better in England and Wales than in Belgium.² Emile de Laveleye, speaking of some parts of the Belgian soil, says :—

The soil of Flanders hardly permits of the natural growth of heather and furze. It is the worst soil in all Europe; sterile sand like that of La Campine and of Brandenburg. . . . Having been fertilised by ten centuries of laborious husbandry, the soil of Flanders does not yield a single crop without being manured once or twice—a fact unique in Europe.³

¹ The most complete information on the rent of agricultural land in England and Wales will be found in the valuable paper by R. J. Thompson, to which reference was made on p. 146. The conclusions there come to with regard to rent are confirmed by a consideration of the rateable value of agricultural land. The available information regarding the price of land is very inadequate, but if it be taken at twenty-five times the average rent, any error will probably be on the side of over rather than under statement.

² See Chapter I.

³ Quoted in *Systems of Land Tenure in Various Countries*, p. 445.

It is a striking fact that if we take the ten arrondissements having the highest agricultural land values, no less than *nine* of them consist, either wholly or in part, precisely of this sandy soil of Flanders of which De Laveleye speaks.

We cannot then account for this difference in values between Belgium and England by difference in fertility. But neither can we account for it by relative density of population, for although the total average density is greater in Belgium than in England and Wales (589 per square mile as compared with 558), this alone could not account for a difference in value of more than 100 per cent.¹

If we put aside these two factors as entirely insufficient to explain the great difference in the value of agricultural land, to what can it be ascribed? It must, of course, be due to the fact that the demand for land in Belgium, in relation to the supply, is greater than in England and Wales. But why is it greater? The principal reason would appear to be that England is a country of comparatively large farms, and Belgium a country of small ones.² The average size of a farm in Great Britain is sixty-three acres, as compared with fourteen and a half in Belgium. In both countries the demand for small farms is greater than the demand for large ones, as comparatively few persons are possessed of sufficient capital either to rent or buy the latter, and so there is but little competition to acquire them when they come into the market. But this is not the case with small ones.

All through the nineteenth century the average size of holding in Belgium has been decreasing, a tendency which is, in part, due to the law which insists upon division of property at death among children or other heirs.³ This

¹ It may be urged that instead of comparing the average population per square mile of *total territory* in the two countries, the average number of persons per square mile of *cultivated area* should be compared. If this be done, it is found that the figures are 759 for England and Wales, and 866 for Belgium. The difference between these figures is still too small to account for 100 per cent difference in the value of agricultural land.

² The word "farm" is here meant to cover agricultural holdings of all kinds.

³ The question of the extent to which the subdivision of the land in Belgium is economically advantageous is discussed on p. 112.

law was passed at the end of the eighteenth century, just about the time when in England, in consequence of the industrial revolution, there was arising a class of wealthy manufacturers, who, anxious to "found a family," were completing the expropriation of the yeoman class and creating large landed estates.

The large farms in England are worked by agricultural labourers, who have, as a rule, no interest in the success or failure of their year's work beyond the payment of their wages. As they are not in any way bound to the soil, they are exposed to the full attractive force of the towns, to which very many of the most enterprising and energetic yield. In consequence, farmers find themselves left with labour of second-rate quality, although the wages are considerably higher than when the quality of the labour was better. It is obvious that their farms tend to be less profitable than farms cultivated by men who work with a will, because they are directly interested in the result of their labour. This is a factor which militates against the payment of high rents for farms in England.

But in Belgium there is no large class corresponding to the English agricultural labourer. By far the greater part of the work of agriculture is performed by the farmers themselves (either owners or tenants), or members of their families who are directly interested in the success or failure of their work.

Although the life of the small farmer in Belgium may be hard, he knows that, given health, industry, and a fair amount of intelligence, work on the land will provide him with an assured living, even if a modest one.¹ He values, too, the greater command of his own time which his position gives him, in comparison with a paid labourer

¹ Of course, small farmers, like all persons in business on their own account, have to reckon with times of unusual depression, but men who own their farms or are under reasonably considerate landlords can usually weather such storms. They may have to accept low prices for what they sell, but their farms supply them with food, and they are very much better off than labourers who are thrown entirely out of work. On the other hand, the lot of the small farmers is precarious in times of severe agricultural depression if they have a heavy mortgage on their land.

or industrial workman. As a consequence, whenever the little farms into which Belgium is for the most part divided come into the market, there is a keen competition to secure them, either to set up a son or to extend the parental holding. Frequently the demand for them comes from workmen who, although working in towns, have never ceased to live in the country, and have not lost their love of the soil.

Another point which must not be forgotten is that, as the greater part of Belgium is covered with small holdings, whenever a little plot of land becomes available, the possible buyers or tenants are on the spot; whereas in England, even if a large farm were divided up, there would seldom be a sufficiently large number of people anxious to buy or rent in the immediate vicinity, to cause so active a demand as in Belgium. Thus it may be said that the tendency of subdivision to raise the price of land is cumulative.

The subdivision of land and the high relative density of the agricultural population (there are ninety-five persons engaged in agriculture per square mile of cultivated land in Belgium, as against twenty-eight in England and Wales) are probably the main reasons for the great difference between land values in Belgium and in England. This fact is brought out clearly in the maps given at p. 152, which show how closely the areas of Belgium where the soil is most subdivided and where the agricultural population is the densest correspond with those where the land values are the highest.¹

In parts where the agricultural population is dense, and the steady and increasing competition of the small buyer is a material cause of the rise in the price of land, there is no doubt that a real "land hunger" exists. Every one

¹ These maps are based on figures taken from the report on the 1895 Agricultural Census. It has been thought better to make use of these figures rather than of those specially obtained by the writer for this volume, because by using the 1895 Census returns it is possible to obtain figures dealing with land values, density of agricultural population, and subdivision of land *all referring to the same year.*

wants to have a plot which he can call his own.¹ First he will try and scrape together enough money to buy his house, then, as his savings enable him to do so, and as his opportunity occurs, he will rent or buy little bits of land for the cultivation of crops. So intense is this land hunger that he will toil early and late to save more money ;

NOTES TO MAPS

The maps show that, generally speaking, in the regions of highest land values the agricultural population is densest and the land is most subdivided. But since other factors affecting land values come into play, there are exceptions to this rule, and though these need not be discussed in detail, the more striking ones may be given.

The only *arrondissement* with very high land values outside the compact group in the north-west of Belgium is Waremme, where the agricultural population is sparse and there is comparatively little subdivision. The high price here is due to the fact that the soil is the best in all Belgium for the cultivation of sugar-beet, a profitable crop, which makes it possible for the landlords to obtain high rents.

Contrast with this the *arrondissements* of Virton and Arlon. Here the remoteness of the region from centres of population, its inaccessibility to markets, and the inferior quality of the soil counteract the tendency of great subdivision and a somewhat dense agricultural population to raise the price of land.

In the extreme west of Flanders the price of land is higher than might be expected from the limited extent of subdivision and the comparative sparsity of the agricultural population. In this region the high prices are explained by the exceptional richness of the pastures.

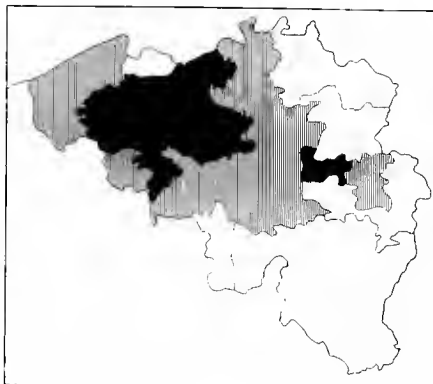
and so great is the competition for small plots that prices much in excess of their real worth are frequently paid. This means that the yield from the land is not sufficient to

¹ This land hunger is referred to incidentally in a letter received by the writer from a village in the *arrondissement* of Louvain. "All or nearly all farm labourers here," says the correspondent, "are or intend to become small holders. It is they who cause the rise in rents. When there is a field to let there are at once ten applicants for it, sometimes people who own neither house nor cattle. They will invest everything in land, and I am afraid that cultivation on a large scale is menaced. I believe one could easily dispose of a 250 acres farm in any of the villages in this neighbourhood if it were divided up into small holdings."

The Price of Land 1895

Arrondissements where the average price of arable land is less than £33 per acre

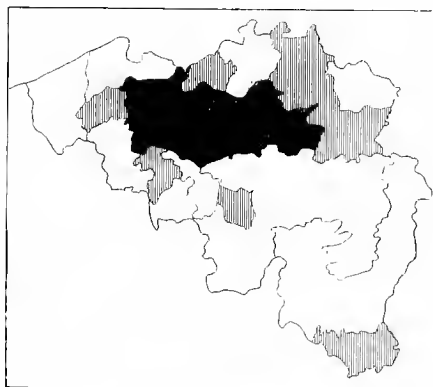
- ditto from £33 to £44 p. a.
- ditto from £44 to £58 "
- ditto above £58



The Subdivision of Land 1895

Arrondissements where the number of holdings of $1\frac{1}{4}$ to $12\frac{1}{2}$ acres ($\frac{1}{2}$ to 5 hectares) per 100 sq. miles of cultivated area is less than 2800

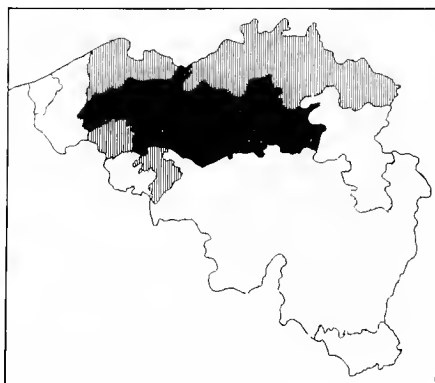
- ditto from 2800 to 3600
- ditto from 3600 to 5200
- ditto more than 5200



The Agricultural Population 1895

Arrondissements where the number of agriculturists per square mile of territory is 110 or less

- ditto from 110 to 170
- ditto from 170 to 220
- ditto over 220



give reasonable interest upon the price paid. The sellers of large farms are fully alive to the reality of this land hunger among workmen and small cultivators, and very frequently divide up their farms before offering them for sale. A landowner who desires to sell or let his farm in small lots need not, as a rule, incur any capital expenditure for new buildings, fences, etc. He has only to express his intention, and the peasants living all round will take the land *as it is*. They already have houses, which are not infrequently their own property, and unless they want the land for raising cattle, they need no fences. Thus, a factor which stands in the way of the subdivision of land in England does not operate in Belgium to any important extent.

The figure to which land values and rents have been forced up by the competition of small buyers and small tenants often compels a man who has to maintain a family to work far too hard, if he wishes to live at all comfortably upon a small holding. Unfortunately, as will be pointed out later in this chapter, a farm tenant cannot *permanently* better his condition to any great extent by improving his methods of cultivation or by taking advantage of co-operation, for no sooner does he do this than his improved position tempts more men to seek for land, thus forcing land values up still further. Indeed, it may be said that farmers are in the long run penalised for improving their methods of cultivation.¹ It is true that the cultivator who owns his land does not feel the effect of high prices until he wishes either to sell it or to buy more. But, as pointed out in Chapter XI. (p. 120), the Belgian peasant hardly ever voluntarily sells his land; on the contrary, he is always seeking to add to his holding if he can possibly afford to do so. To a large extent, therefore, what is true of the tenant is true also of the small peasant owner.² In the case of

¹ In making this statement, the writer is not forgetful of the large number of Belgian landlords who do not exact a rack rent in the case of old tenants. This is a fact which, so far as it operates, modifies the conditions referred to above.

² The relative advantages of ownership and tenancy in the case of peasants are discussed on p. 117.

those peasant owners who have mortgages on land bought at a price above its real value, the burden of finding year by year means to pay the interest is often a heavy one. If they have no reserve of capital they will very likely be crushed by the burden in times of agricultural depression, and obliged to sell the land when its value is at the lowest. Although statistics are not actually available to prove it, there is little doubt but that in a country like Belgium the number of proprietors of land tends to rise and fall according to the prosperity of agriculture. In good times a great many small land-buyers come into the market. They are not actuated by the desire to invest capital at the most profitable rate, but to buy land at almost any cost, to be cultivated by themselves and their families, and hence they pay prices which are in reality too high. In times of agricultural depression some of them are no longer able to retain their dearly bought property. The large buyers come into the market and possess themselves of small plots at their depreciated value. What this proceeding means in anxiety and suffering to the small cultivator it is impossible to portray, but one can realise something of the deprivation undergone to buy the little plot of land, of the long hours of arduous work to gain from it a scanty living, of the despair which comes with the knowledge that it will no longer be possible to retain what has been so hardly won, and of the final blow, when the little plot on which the peasant had hoped to live all his days is sacrificed at a price which perhaps only partially meets the claims of the mortgagees, leaving him penniless and ruined, to become once more a wage-earner and a servant.

It may be asked, "How is it that the Belgian farmer is able to pay twice as much for his land as the English?" We have seen why the *demand* for land is greater in Belgium than in England, but the reasons given for this do not account for the ability of the Belgian farmer to pay the high price for land demanded of him.

The explanation must be sought in the successful efforts

of the Government to assist agriculture and increase its profits in a country where the peasant is naturally an excellent cultivator and an extremely hard worker. The methods adopted to achieve this end are described in detail in different chapters of this book, but a few may be named here as being particularly worthy of the attention of English readers. An important one is the extraordinary development of light railways all over the country which has opened up the agricultural land of Belgium to an extent entirely unknown in England and Wales. Another factor is the higher standard of agricultural education. One consequence of this has been that, even when allowance is made for exceptional quantities, due to the infertility of much of her soil, Belgium uses more artificial manure per square mile of her cultivated land than any other country in the world. The development of agricultural co-operation, in part aided by the Government, is another factor which has considerably increased the immediate profits of the farmer, and made it possible for him to pay high prices.

The artificial method of assisting the agriculturist by the imposition of import duties has only been practised to a limited extent by the Belgian Government. All cereals are imported free, with the exception of oats, upon which an import duty of 1s. 2½d. per cwt. was imposed in 1895. Potatoes and beetroot are likewise imported free; indeed the only import duties upon vegetable products, except oats, are upon articles which occupy but a small proportion of the soil of Belgium, and need not concern us here. Undoubtedly the most important of the import duties are those upon cattle and sheep and meat. These duties have raised the price of meat, and the extra price obtained from the consumer has, in the first instance, added to the profits of the farmer. This has resulted in an increased demand for land suitable for cattle-raising, and thus prices and rents have been raised. Exactly to what extent protective duties have operated in this direction it is impossible to say, but that they have raised the price and

rent of land is unquestionable.¹ The increase in the price of land due to a partial adoption of a protective policy stands by itself. It represents a mere shifting of wealth from the consumer to the landowner, and for a time, to the farmer.

These are the principal factors which enable the tenants to pay rents so much higher than in England. The principal reason why the landlord can exact them, is that the alternative to a life on the land which is offered by industry is much less attractive than in England, on account of the lowness of industrial wages; and this fact weakens the position of a tenant when bargaining with his landlord. If town conditions were better, the agriculturists would choose a town life rather than pay away in the form of rent so large a portion of the result of their toil, and thus the demand for land would become less keen, and rents would fall.

The facts set forth in this chapter may be briefly summarised as follows: The price and rent of agricultural land in Belgium are about twice as high as in England. This is not on account of the superior quality of the soil, but of the keener demand for land owing to the comparatively dense population in the country districts, which

¹ The principal protective duties upon agricultural products in Belgium are as follows:—

Oats: A duty on oats of 1s. 2½d. per cwt. was imposed in 1895. This is an important crop in Belgium, 13 per cent of the cultivated area being devoted to growing it.

Meat: In 1887 a duty was imposed upon meat, except bacon. If imported in whole or half carcasses, the duty is 6s. 0½d. per cwt.

Cattle and Sheep: Imported alive. (Imposed 1887.) 1s. 7d. per cwt. on bulls and bullocks; 2s. per cwt. on oxen, steers, and calves; 1s. 2d. per cwt. on cows and heifers; 1s. 7d. per head on sheep, and 9½d. per head on lambs. All other live animals, including pigs and horses, are admitted free.

Butter: (Imposed in 1887) 8s. per cwt.

[In 1906 about 40 per cent of the cultivated area of Belgium was under pasture or devoted to the production of hay and fodder crops, while 12 per cent was under roots of different kinds. It must, of course, be remembered that pasture is used for other purposes than the grazing of protected stock, for a large number of horses are bred annually.]

in its turn is largely accounted for by the subdivision of the soil, which has rendered possible a widespread system of small holdings. The Belgian agriculturists are able to pay so high a price for their land because: The labour applied to the land is more efficient than in England, most of the labourers having a direct interest in the results of their work; agricultural education is better; cultivation is more intensive; there are more light railways; agricultural co-operation is more fully developed, and certain agricultural products are protected.

It is important to notice the enormous effect which these factors have produced upon land values, and Englishmen should realise that the price and rent of agricultural land will rise as the methods of farming become more intelligent and successful. Thus the workers upon the land, although their lot may be better than it is at present, will have to pay to the owners a higher rent than they are doing at the present time.¹ How far the increase in rent which will be demanded from them will retard the improvement in their social condition which is sought for by reformers will depend on many and complex factors. But that a large share of the increase in national wealth expected to result from the reforms now being actively discussed in England will, under the existing laws with regard to the land, ultimately go to the landlords rather than to the tenant-workers seems absolutely certain.²

¹ Of course in so far as any increment in land values might be due to capital expenditure on the part of the landlord, it is only fair that an increased rental should be charged on that account, and nothing said or suggested in this chapter is intended to contradict such a contention.

² The argument that this point will be met by making small holders proprietors rather than tenants is discussed in Chapter IX., where an attempt is made to show that this is not the true solution of the difficulty.

CHAPTER XIII

WOODS AND FORESTS

BEFORE turning to the agricultural produce of Belgium, we may consider one of the methods of dealing with inferior soil.

The question of the afforestation of waste lands is one which is beginning to receive serious attention in Great Britain. The rapid depletion of the world's supply of timber is causing the British people to inquire whether it would not be possible for them to plant some of their own millions of acres of waste land;¹ while those who concern themselves with the unemployed problem press forward schemes for introducing this industry, in the belief that in this way much lucrative work would be found for unskilled labourers.

Belgium has, especially of late years, pursued a vigorous policy of afforestation of waste lands, and a study of her experience will throw some light on the conditions necessary for the success of such enterprises, the interest that may be expected on capital expended, and the amount and kind of labour required per acre of forest.

In 1905, the last year in which returns were obtained in Belgium, there were 1,321,788 acres of woods and

¹ "It will be found in our evidence that experts of high authority have recorded the opinion already expressed in many reliable publications, that the world is rapidly approaching a shortage, if not actual dearth, in its supply of coniferous timber, which constitutes between 80 and 90 per cent of the total British timber imports. The great area of waste land in these islands, which might be afforested, and with regard to which such valuable evidence has been given, thus becomes a matter of grave national concern." (Report of the Departmental Committee on British Forestry, 1902, Cd. 1319.)

forests, about 18 per cent of the total area of the country. Great Britain has only 4 per cent of its area (3,030,000 acres) devoted to woodlands, less than a quarter of the proportion found in Belgium.

The most densely wooded part of Belgium is the Ardennes, a region which comprises about one-third of the total woods in the country. Next comes the Campine. Nearly half of the Belgian forests are in these two regions.

In 1905, 62 per cent of the Belgian forests were owned by private persons, 31 per cent by communes, $5\frac{3}{4}$ per cent by the State, while other public bodies held a little over 1 per cent.¹

During the last ten or twelve years the nation has increased its possessions in property of this kind by nearly 25 per cent. The State has not, however, always recognised the importance of this direct ownership. At the beginning of the last century, an exactly opposite policy was pursued; and between 1814 and 1830, in the province of Luxembourg alone, it sold 55,037 acres of forest land, an area almost equal to its total holding in 1895. The consequences of this sale were disastrous. After the felling of the timber a considerable part of the ground was allowed to lapse into waste land, and other portions into very inferior and unprofitable woodland. An official report published in 1867 contains the following remark: "We have before our eyes a manifest and irrefutable proof of the truth of the doctrines held by the forestry experts. The experiment, which has unfortunately been made in our

¹ AREA OF WOODS AND FORESTS IN BELGIUM IN 1905

Owned by.	Acres.	Per cent.
State	76,006	5·75
Communes	411,276	31·11
Public Bodies	15,814	1·20
Private Owners	818,692	61·94
	1,321,788	100·00

district, proves that private individuals are the worst proprietors of forests. . . . If all these splendid trees now destroyed had remained the property of the State, what valuable resources they would have been for the timber supply of the country! What work they would have provided for our working-class population! How they would have swelled the traffic returns of our railways!"

And the commissioners were right. It is now being increasingly recognised that, except in the case of trees of rapid growth, the afforestation of waste lands is not likely to be successfully accomplished by private enterprise. Capital has to wait too long for a return, and that continuity of policy over long periods which is essential to success cannot be guaranteed.

Thanks to the educational work carried on by the various officials of the State Forestry Department, the rate at which the available land is being planted is much more rapid now than it used to be. In the old days afforestation was regarded with suspicion, chiefly because some of the communes which had tried it had met with very slight success. This was due to the very unscientific methods adopted, but still, the impression that the policy was one of failure was difficult to eradicate, and the peasants, seeing that if carried into effect it would rob them of some small but certain and immediate benefits, hesitated to give these up for many possible advantages in the comparatively distant future. The common pastures on which their cattle grazed cost them nothing, though they produced little. "*Vivons d'abord, et après nous la fin du monde!*" was the motto they adopted. But the opposition to afforestation came principally from large farmers who grazed their flocks of sheep on the common land. They were anxious enough to bring their own waste land into cultivation, but strenuously withstood the conversion of the common pasture to more profitable uses. They feared too that woodlands would encourage rabbits. "*Qui sème les sapins sème les lapins,*" ran their saying. Gradually, however, the forest officials have almost overcome these objections, and the

waste lands which hitherto have yielded next to nothing are steadily being afforested.

The Belgian Government has taken up this question in the most thorough and systematic manner. The Department of Woods and Forests is under the control of the Minister of the Interior and of Agriculture, who, for the purposes of forestry administration, has divided the kingdom into eleven inspectoral districts, each of them containing three cantonments in charge of sub-inspectors, and subdivided into areas called *brigades*, which are under the care of head foresters. These officials, numbering in all about 750, are responsible for the State and communal forests, and give help and advice in connection with those privately owned, when desired.

Their education is well organised. The superior officials must pass the same examinations as the State agricultural experts (*agronomes de l'État*), involving a three years' course of study, followed by a year spent in studying forestry. If, after this, they succeed in obtaining a position as assistant State foresters, they are for a time attached to one of the head foresters to acquire practical knowledge, and in addition usually study forestry abroad. The course of four years is usually taken at the agricultural college of Gembloux or Louvain. The State also provides suitable instruction for men seeking to enter the lower ranks of the service. Courses of sixty lessons spread over two winter sessions are given by State experts in different forest regions. These take place in the woods themselves, and are free and open to the public. Men who have attended them should be able to pass the examination for an ordinary forester's certificate.

In addition to providing this complete system of education in the subject, the State arranges for a large number of public lectures on the management of forests, to be given in woodland districts. These are attended by private individuals, gamekeepers, farmers, and teachers, to the number of about two thousand yearly. The audiences are instructed in methods of afforesting waste land, of improving existing

woods and keeping down noxious insects. The course usually consists of three lectures, the last one, if possible, taking the form of a practical demonstration. It may be mentioned here that the State is taking steps for the destruction of the insect pests which haunt woods, and in 1901 the notification of their appearance was made compulsory, the owner of the forest infected being required to use such measures for their eradication as might be considered necessary by the Forestry Department. With a view to giving practical demonstrations in forest management, the State has bought considerable areas of land to be used as demonstration plots, and also for the researches of State experts into improved methods of management and the means of overcoming special difficulties. State nurseries have also been established, where young trees suitable to Belgian soil are reared, to be sold to communes at market prices.

Every encouragement is given to the communes to afforest their waste common lands. Usually the State is willing to pay half the cost of planting the trees, and to look after them free of cost for the first ten years and for about 8d. per acre per annum in after years; they are also exempted from taxation for the first ten years. This supervision costs comparatively little and ensures proper management in the critical early years. In addition to this financial help, the best advice is placed at the disposal of any communes or private individuals wishing for it. Obviously it is of the first importance in the creation of a new forest that the preparation of the soil should be perfect, that the trees should be planted in the right way, and at the right distance apart,¹ and that their selection should be made by experts who thoroughly understand what kinds of trees will give the best results under any given circumstances.

All important schemes for such treatment of communal

¹ Much of the unprofitableness of timber-growing in Britain is said to be due to the fact that the trees are planted much too far apart, and that the land, in consequence, only bears half a crop.



THE AFFORESTATION OF WASTE LAND WHICH BELONGS TO THE COMMUNES, SHOWING THE CHARACTER OF THE SOIL BEFORE PLANTING.



WASTE LAND IN THE ARDENNES BEFORE AFFORESTATION.

land are most carefully examined by an advisory commission consisting of local foresters and delegates from the communal councils aided by a high official of the Government Department. The commissions are also willing to give advice on the improvement of existing forests, and much has already been done in this direction. When planting, especially in the neighbourhood of health resorts, the importance of preserving and developing the picturesque character of the landscape is not forgotten; witness the beautiful districts around Spa and Rochefort.

A considerable change is coming over the Belgian plantations in respect of the choice of trees. The old forests were chiefly composed of the slow-growing broad-leaved trees, especially beech and oak, and these are still in the majority.¹ Most of the areas recently brought into cultivation have, however, been planted with conifers, which give a better return upon capital, especially in the poor soils of the Campine and the Ardennes.

With a view to showing the kind and amount of labour required in connection with forestry, a brief description of the operations must be given. As we are studying the question from the social and not from the technical standpoint, the matter must be treated simply, and it will suffice to take as an example a pine forest in the Ardennes and follow the various proceedings there, merely remarking that in other places these differ from the example taken, according to the kind of tree planted, the situation, and the character of the soil. In the creation of a forest, the first thing is to see that the ground is properly drained, and it is frequently necessary to do this artificially. In the Ardennes the custom is to dig parallel ditches, the material extracted being placed in small heaps over the land. Two years are then allowed to go by, at the end of which time the extracted soil has become thoroughly tempered by the weather, and forms a suitable medium in which to plant

¹ Percentage of Belgian forest area :—

	1880.	1895.
Under conifers . . .	24·29	28·90
Under broad-leaved trees . . .	75·71	71·10

the young trees. On the average it takes a man thirty to thirty-five days to drain $2\frac{1}{2}$ acres of land. The work is usually let on piece, and the workers lodge in turf huts if the site is far from a village. Agricultural wages in the Ardennes are higher than in any other region of Belgium, and men engaged on draining earn from 2s. 9d. to 3s. 2d. per day. Thus the cost of draining $2\frac{1}{2}$ acres of land may be estimated at about £4 : 16s. as an average figure. When the land is properly drained it is ready for planting, which is usually done by a man and one or two women. The former makes the holes with a spade, specially shaped for the purpose, and the latter deposit the plants in them, as soon as they are made. In order to ensure the successful development of the plants, the roots are often surrounded by a little good soil brought from a distance, to which is added a small amount of basic phosphate or lime. The amount of labour required in planting varies according to the quality of the soil, but on the average it takes a man and a woman four days to plant an acre, the man receiving 2s. 5d. a day and the woman 1s. 8d. The total cost of planting, therefore, works out at about 16s. 4d. per acre for labour, to which must be added about 32s. for 4000 trees. Thus the total cost of draining and planting an acre of land is a little over four pounds.

The labour employed in planting need not be skilled, but the supervision must be expert and close if good results are desired. Some communes, instead of providing workers who, even though unskilled, are moderately apt and intelligent, make use of old and infirm or very young people, indeed of any cheap and inefficient labour they can find. Worse than that, some even force defaulting ratepayers to work out their rates in the woods. Such methods naturally fail and are discouraged by the State Forestry Department, which refuses to grant subsidies unless the instructions of the foresters are adhered to.¹

When the planting is over, there is little more to do

¹ It is interesting to note in passing that the officials have in many cases succeeded in persuading the communal councils to set aside from their



PLANTING PINE TREES ON THE ARDENNES, UNDER THE SUPERVISION OF A
GOVERNMENT FORESTER.



PRICKING OFF YOUNG PINE TREES IN THE GOVERNMENT NURSERIES (HERTOOGENWALD).

To face page 164.

until the first clearing, at the end of eighteen to twenty years, after which clearings are made every four or five years, and last comes the felling of the timber when about forty years old, or sometimes a little more. The exact time which must elapse before the timber is ready for felling depends on the purpose for which it is required, and also on the site and quality of the soil, but forty years may be regarded as an average period for pine forests in Belgium.

Of course, the greatest demand for labour comes when the timber is felled. No official statistics give the exact amount involved, but M. Crahay, the principal inspector of forests, in a letter to the present writer, reckons the cost of the labour to be equal on the average to 60 per cent of the value of the timber sold standing.¹ On this assumption, he estimates the total wages paid in connection with the felling of timber in Belgium for the year 1905 at £233,654. This sum includes all labour involved up to the delivery of the timber at the sawmills or the nearest railway station, as the case may be. In the same letter² the total cost of the labour involved in the other processes of forestry in the year 1905 is estimated as follows:—

Labour in connection with the periodical clearing of forests prior to final felling	£55,754
Labour in connection with the cutting of wood which was not sold, but was used by the owners	43,947
Labour for various processes connected with the improvement of forest lands	47,214
Labour under minor miscellaneous heads, say	19,429
	£166,344

ordinary revenue reserve funds, so that in case of any unforeseen extraordinary expense occurring, they would not be tempted to cut down their forests prematurely.

¹ Of course the ratio between the cost of labour and value of timber varies with the value of the timber and with the facilities for felling it and of transport. In the Ardennes, for instance, the labour involved in felling timber equals the value of the timber sold standing; in other districts it is only equal to half the value of the timber.

² See Appendix, p. 571.

This makes a total of £400,000, which is M. Crahay's estimate of the wages paid in 1905 in connection with this industry. He states that only about one-tenth of the workmen are employed in the forests during the whole year, and nine-tenths work for four months out of the twelve. He further estimates the average daily wage at 2s.¹ Accepting these figures, we arrive at the conclusion that about 30,000 men are employed in the Belgian forests for four months every year, and 3300 throughout the whole year. This gives a total of 33,300 men employed for the whole or part of the year. These figures do not include trained foresters, nor do they take into account the labour of all the subsidiary industries: the burning of charcoal, the sawmills, the making of *sabots*, the manufacture of wood spirit, and the production of turpentine. Until recently many of them were carried on within the forests, and even now picturesque groups of charcoal-burners and *sabot*-makers may be seen working in the woods; but with the improvement in the roads these old industries are dying out, and more and more of the raw products are being transported to factories and dealt with there.

Belgium has not yet developed trades in carving or toy-making, such as are to be found in Germany and Switzerland, but there has been some progress in this direction. In one district of the Ardennes short courses of instruction in wood-carving have been privately organised, with very hopeful results; and the Government has recently made an enquiry into the extent of the subsidiary industries and their possible development.

Another branch of work connected with forestry still gives employment to a considerable number of people, namely, the procuring of bark for tanning leather, and though the increasing use of chemical preparations for this purpose may doom the industry to gradual extinction, there are still numbers of men who can earn from £2:16s. to

¹ It must, of course, be remembered that the working days are short in the forests during the winter months. The wages vary greatly from district to district; they are highest in the Ardennes, and lowest in the Campine.

£5 for two or three weeks' work in the spring by cutting down and barking the young oak trees.

We now pass to the important question of the return upon capital which the Belgian forests yield. In 1899 the Government made an enquiry into the timber yield of Scotch fir in different parts of Belgium at different ages. This tree was chosen as being the most important of the soft-wooded trees, and particulars were obtained of its timber yield for 166 different forest areas. For purposes of classification these were grouped under the four following heads:—

- (1) The lower portion of the Campine. (N.E. of Belgium.)
- (2) The higher portion of the Campine. (N.E. of Belgium.)
- (3) The two Flanders, and the centre of Belgium, including Brabant and Hainaut.
- (4) The Ardennes, including the district of the Condroz and La Famenne. (S.E. of Belgium.)

These groups were chosen as representing different conditions from the point of view of climate, soil, etc., and in each of them the areas were again divided into three classes, according to the quality of the soil. All areas in which conditions were exceptional were excluded from the investigation; and, therefore, its results are fairly typical.¹ If we select medium quality soil in each of the four groups, and examine the timber yield at forty years of age, we may feel confident that we are dealing with fairly reliable average figures. In the lower Campine, assuming the capital value of land to be £1:17:4 per acre, and the cost of planting £4:10s. per acre, the yield upon capital invested works out at 5·6 per cent, taking the value of the timber to be 9s. 1d. per cubic yard. In the higher Campine, with land at £3:4:8 per acre, and the cost of planting £3:4:8, the capital earns $5\frac{1}{3}$ per cent, again calculating the value of the timber at 9s. 1d. per cubic yard. In the central district, estimating the cost of land at £6:9:4, and the cost of planting at £1:12:4, we find that the interest on

¹ This view is confirmed by other information supplied to the writer concerning forest areas. This information, and also the detailed results of the Government enquiry, will be found in the Appendix, p. 573.

capital works out at 4·9 per cent; in this case the value of the timber is greater, and is taken at 10s. 11d. per cubic yard. In group 4, which, it will be remembered, includes the district of the Ardennes (the chief forest area of Belgium), the interest on capital is $5\frac{1}{2}$ per cent. Here land values are taken at £3 : 4 : 8 per acre, the cost of planting at £4, and the value of the timber at 9s. 1d. per cubic yard. In all cases, of course, the interest is compound. The great variation in the cost of planting in these regions is due to the different characters of the soil, necessitating in some cases considerable expenditure for draining, in others for manure, and so forth; while in other cases, notably in the central district, scarcely any preparation of the soil is required.¹ It will be noted that the selling price of timber has been taken at 9s. 1d. per cubic yard (except in the central district, where but little is grown). This is just the price given by Dr. Schlich as one which may be safely counted on in England.²

The figures referring to the cost of planting, to land values, and to the selling prices of timber which have been

¹ The low cost of planting in Belgium (average £3 : 6 : 8 per acre) will strike the English reader. There are three reasons for this which may be named. Firstly, the forests are very seldom fenced, presumably because the rabbits are better kept under in Belgium than in England. Secondly, the Belgian workman, especially in the country districts, is much more careful than the Englishman to effect every possible economy in his work, even if it be a very small one. This difference between the two nationalities is very noticeable in the way in which they construct and work their light railways and in their methods of farming, especially in the case of small farmers, and it is noticeable also in the way they approach the question of afforestation. It is much to be doubted whether those who undertake afforestation for English landlords are nearly so economical in their method of work as are the Belgians. Thirdly, it must be remembered that wages in Belgium are materially lower than in England.

² *Forestry in the United Kingdom*, p. 42. There is an import duty on timber introduced into Belgium of 7½d. per cubic yard (or 1s. 3d. if it is in the form of squared trunks, sawn on all four sides). But unbarked timber, up to a certain diameter, as well as wood in certain other forms, is admitted free. The large free list and the lowness of the duties, where imposed, prevent the raising of the selling price of timber in Belgium to any serious extent. It cannot, therefore, be urged that the forests of Belgium are profitable on account of the protective duties. Planed floor boards pay 5s. 1d. per cubic yard import duty, but the great difference between the duties on unhewn timber and planed boards constitutes protection for wood-working trades rather than for timber in the rough.

made use of in calculating the interest on capital, have been kindly supplied to the writer by M. Crahay, who considers them safe average figures for their respective regions. In a letter on the subject he says, "For the spruce fir, under conditions which suit it in the Ardennes, the return on capital may be reckoned as being still greater. We may estimate that an average plantation of spruce would produce in forty years 327 cubic yards of timber; many produce 393 and even 458 cubic yards. An acre of forest yielding 77 cubic yards would produce £60 : 14s. In the districts where spruce firs are planted land is not worth more than £3 : 4 : 8 per acre. The drainage of the land and planting costs about £4 per acre, making a total initial capital of £7 : 4 : 8 per acre. This shows a yield on capital of $5\frac{1}{2}$ per cent at compound interest."

Later in the same letter M. Crahay says that "the figures given are only averages, and we may hope that with the progress in the knowledge of sylviculture they may be considerably increased." He then gives another example where a plantation of spruce fir showed a return of $6\frac{1}{2}$ per cent when fifty-three years old, and adds, "In certain cases the return upon capital from a forest with resinous trees will amount to five, six, and even exceptionally seven and eight per cent." In Belgium it is generally considered that the cost of supervision of the forests and of taxes, and maintenance up to the age of forty years is covered by the letting of the sporting rights and by the sale of the clearings.¹ The game consists of deer, roe-deer, wild boars, hares, pheasants, and blackcock, and the sums paid for sporting rights are often considerable. It would thus appear that forests of resinous trees, which are those chiefly planted at the present time, yield very satisfactory financial results in Belgium.² When we realise that in addition to

¹ The clearings in pine forests may be taken as producing from 42 to 53 cubic yards of wood per acre. During the forty years following the time of planting, calculating at an average of 6s. a cubic yard, this will yield from £12 to £16 an acre.

² Unfortunately the writer is without figures for other varieties of trees, but it is well known that these do not show so good a return on capital as the resinous varieties.

this, the Belgian forests provide work annually for about 32,000 men in winter, 3200 of whom are employed permanently, and for 1800 officials, we begin to appreciate the social and economic importance of forestry.

According to the second Report of the Royal Commission on Coast Erosion, Afforestation, etc., the approximate available area for afforestation in Great Britain is $7\frac{1}{2}$ million acres.¹ Assuming the conditions to be the same in Great Britain as in Belgium, $7\frac{1}{2}$ million acres of forests would provide labour annually to the value of £2,270,000. Wages in Great Britain are fortunately higher than in Belgium, and for work in the forests we might estimate them at 3s. a day, which is approximately the average wage of agricultural labourers. Assuming that one-tenth of the workers were employed during the whole year, and nine-tenths for four months in the year, as in Belgium, we should employ 12,000 permanently and 109,000 in winter,² not taking into account trained foresters, or the men engaged in the industries which would certainly spring up in connection with the growth of timber on a large scale.

The provision of so much work at a period of the year when unemployment is most acutely felt would be a valuable contribution to the solution of a very difficult problem. Nor must it be forgotten that in many districts where labour is scarce the presence of a body of men, who are employed on work in connection with the forests in winter, and who are free for other occupations during the summer months, would considerably assist farmers at the times

¹ Cd. 4460, 1909, p. 32. In addition to these $7\frac{1}{2}$ million acres of "mountain and heath," another million acres representing poor tillage land are estimated to pay better as forests than as farming land. But as this area already supports a working population, no account is taken of it here.

² In the above calculations it is assumed that the higher-paid British labour is as cheap as the lower-paid Belgian labour. If this assumption is incorrect, the amount of labour required would be greater and the profit correspondingly less. Although the Belgian labour may actually be cheaper than the British, it is almost certain that as soon as the British workmen became accustomed to the work the difference would be less than the difference between the daily wage paid—3s. and 2s.—for it is an almost universal experience that the productivity of low-paid labour is less than that of better-paid labour.

when agricultural work is most pressing. This view is held by the members of the Royal Commission already quoted. Belgian experience strongly confirms the view expressed in the Report of the Departmental Committee on Forestry and that of the Royal Commission, that on a large proportion of Britain's waste lands "afforestation could be profitably undertaken."¹ And even if the interest earned were a fraction below that which the Government would have to pay for its capital, would that fact condemn the proposal that the British Government should seriously begin the afforestation of some part of the large area of uncultivated land?

"Ah! you English," said the Belgian Chief Inspector of Forests, when discussing the finances of the question, "you always want to know, will it pay? In Belgium we look at the matter differently. We realise that the afforestation of waste lands affords an enormous amount of healthy work for the Belgian people, work required just when otherwise the men would be unemployed. We realise the importance of providing a large amount of home-grown timber in view of the depletion of the world's timber supply, and we think, too, of the beneficial effects of forests, not only upon climate, but on the soil of the waste lands, to the great advantage of the country."

Surely these considerations are important, and the British people may learn from the Belgians the great possibilities which lie in the afforestation of our enormous areas of uncultivated land.

¹ It may be urged that in many districts timber-growing could not be carried on profitably, owing to the lack of cheap transport facilities. This fact serves to emphasise the view expressed in Chapter XXI., that no country can properly develop its agriculture (including the growth of timber) without a complete system of light railways, such as Belgium possesses.

CHAPTER XIV

CROPS AND LIVESTOCK

HAVING considered the soil of Belgium and the conditions of land tenure, the number of proprietors and the size of their holdings, as well as the number and size of farms, and dealt with her method of afforesting waste lands, we now turn to examine the crops which are grown. Our examination will be confined to questions of economic interest, of which four in particular will claim our attention: What proportion of the cultivated area is devoted to the principal crops? Has the proportion changed materially during the last half-century, and if so, why? How does the yield per acre compare with that of other countries, especially with Great Britain, with its larger farms and more extensive methods of cultivation? How far is Belgium able to produce the food required for her own needs?

The three most striking facts in connection with Belgian agriculture at the present time are, firstly, its intensity; secondly, the marked decline in the cultivation of cereals for human consumption, notably wheat; and thirdly, the great development of cattle breeding. On all sides pasture is being laid down, and tons upon tons of barbed wire fencing are being sent into the country districts for the enclosure of grazing fields.¹

¹ The percentage of cultivated land devoted to cereals declined by 8·2 per cent between 1846 and 1895 (from 2,170,000 to 2,000,000 acres), while the annual censuses show that between 1900 and 1906 the area devoted to cereals on holdings of 2½ acres and over declined by 1·9 per cent. On the

If we examine the kinds of cereals grown, the decrease in the cultivation of those used by man becomes still more apparent. The area under wheat and spelt,¹ used almost exclusively for human consumption, fell by 25½ per cent between 1846 and 1895, while that under oats, used for feeding stock, rose during the same period by 23 per cent. Buckwheat, once used on a considerable scale for human consumption, occupied in 1895 about one-sixth of the area devoted to it in 1846.² The amount of land under barley, used partly for beer-brewing and partly for stock-feeding, has not greatly changed since 1846; rye also is stationary, but is being less and less used for bread-making, and increasingly for feeding stock, especially pigs. Thus we see that the area devoted to corn grown for human food is being steadily diminished. It is probable that the area under cereals would be still further lessened were it not for the value of the straw in the cereal crops, both as litter for cattle and to make manure.

Turning now to the statistics regarding the number of cattle and other livestock, we see a great development.³ The official statistics show that between 1846 and 1906

other hand, the percentage of cultivated land devoted to root crops and to hay and fodder increased by 6·4 per cent between 1846 and 1895, and by 0·8 per cent between 1900 and 1906. The figures for the latter period refer only to holdings of 2½ acres and over.

¹ Spelt is a cereal intermediate between wheat and barley, but usually regarded as a hard-grained variety of the former.

² The actual areas under each kind of crop at the different periods are given in the Appendix, p. 575.

³ The actual numbers of livestock at different periods were as follows:—

Year.	Horses.	Cattle.	Pigs.	Goats.	Sheep.
1846	294,535	1,203,891	496,564	110,060	662,508
1856	277,311	1,257,649	458,418	...	583,485
1866	283,163	1,242,445	632,301	197,138	658,097
1880	271,974	1,382,815	646,375	248,755	365,400
1895	271,527	1,420,978	1,163,133	257,669	235,722
1900	241,553	1,657,494	1,005,501	...	...
1906	244,893	1,779,678	1,148,083	...	...

the number of horned cattle in Belgium rose by 48 per cent, and this although the 1906 figures exclude stock on holdings of less than $2\frac{1}{2}$ acres. In the period 1846 to 1895 the numbers of both pigs and goats increased by 134 per cent. This far outbalances a decrease of 8 per cent in the number of horses, and of 65 per cent in that of sheep, and inclines the writer fully to agree with the compiler of the report on the agricultural census of 1895, when he says, "Our agriculture is changing. More than ever the production of crops for direct use as human food is being left to countries where cultivation is extensive. Intensive cultivation finds the preliminary transformation of vegetable produce by animal machines more profitable."¹

Of course, when the great reduction in the area of land under cereals is referred to, it must not be forgotten that the yield per acre of the various crops is very much greater than it was formerly; indeed, in the case of the principal ones, the average increase has been about 50 per cent during the last twenty years.²

¹ *Recensement agricole*, 1895, p. 28.

² This is shown in the following table:—

AVERAGE YIELD PER ACRE^(a)

Crop. ^(b)	1846.	1871-1880.	1886-1895.	1900-1906.	Per Cent Increase 1900-1906 over 1871-1880.
	Cwts.	Cwts.	Cwts.	Cwts.	
Wheat . . .	11 $\frac{1}{2}$	12 $\frac{1}{4}$	14 $\frac{3}{4}$	18 $\frac{1}{4}$	49·5
Rye	10 $\frac{1}{2}$	11 $\frac{1}{4}$	14 $\frac{1}{4}$	17	48·5
Oats	11 $\frac{1}{4}$	13	14	18 $\frac{3}{4}$	45·7
	Tons.	Tons.	Tons.	Tons.	
Sugar-beet .	14	13	12 $\frac{1}{2}$	12	... ^(c)
Mangold . .	...	13	18	22	70·3
Potatoes . .	6	5	6	6	30·5

^(a) It will, of course, be recognised that these statistics do not claim to be absolutely accurate. They are obtained by means of forms sent round to every cultivator, who is required to fill in the area of each crop sown and the yield obtained. The figures he supplies are not checked in any way, except when obviously incorrect. The possibility of error, therefore, is great, though no greater in Belgium than in other countries. But although the figures

The facts so far given will have shown that the Belgian agriculturist has had to make great changes in the past thirty or forty years, and—what is more important—that he has made great advances in many directions. The high point which he has reached stands out clearly in the following comparison of his results with those obtained by other European cultivators.

The amount of land actually under cultivation in Belgium in 1895 was 4,734,224 acres, equal to 64 per cent of the total area of the kingdom.¹ This proportion is much the

cannot be accepted as scientifically precise, they serve to show how very great is the progress which has been made in increasing the yield of the various crops.

(b) The yields for cereals are given in weight throughout this chapter because they are so published in Belgium and the other continental countries, and are therefore most easily comparable.

(c) It must be noted that although the yield per acre of sugar-beet shows no change, the quality—as measured by the amount of sugar produced—has been very greatly improved, so that this apparent exception in the table is not one in reality.

TOTAL PRODUCTION FOR BELGIUM IN TONS^(d)

Crop.	1846.	1880.	1895.	1906. ^(e)
Wheat . . .	329,500	414,900	327,800	349,900
Rye	369,700	388,455	498,000	525,200
Oats	279,500	396,228	430,400	604,500
Sugar-beet . .	74,300	1,017,000	1,657,400	168,987,000
Mangold . . .	...	832,000	1,785,300	3,316,300
Potatoes . . .	629,500	2,400,400	2,834,700	2,276,500

(d) These totals have been obtained by multiplying the acreage under each crop, at the date given, by the average production for the preceding ten years, in the case of 1880 and 1895, and for the preceding seven years in the case of the 1906 figures.

(e) Only holdings of 2½ acres and more.

¹ This refers to 1895. Since then more land has been brought under cultivation, but the area is not known. The amount of cultivated land in 1895 was 7 per cent higher than in 1846, but 3½ per cent less than in 1880. The drop between 1880 and 1895 was probably due to the fact that large tracts of land hitherto used for agriculture were required for building and industrial purposes, while on the other hand, owing to the agricultural crisis, but little waste land was brought under cultivation.

Exactly what is the area at the present time cannot be stated, for the

same as that of Germany (63 per cent) and France (65½ per cent). Great Britain has only 57 per cent of her land under cultivation; but this is due to the very low percentage in Scotland (only 25 per cent). If we take England and Wales alone, the proportion (73 per cent) is higher than in Belgium.

Of course different countries vary greatly as to the amount of land which they devote to different crops. For instance, whereas Belgium, Germany, and France all devote about 42 per cent of it to cereals, Great Britain has only 21 per cent under grain crops. On the other hand, the proportion of permanent grass in Great Britain is about twice as high as in the other countries under consideration. It is lowest in Belgium, which is remarkable, for, as will be shown later, Belgium carries more livestock per acre than any of them, and much more than Britain. If we take roots (including potatoes) Belgium and Germany head the list with 12 per cent of their cultivated area under these crops, while Great Britain and France have respectively about 8 per cent and 7 per cent. The three continental countries all have a much higher proportion under "other crops" than Great Britain. In France and Germany this

annual census figures, which date from 1900, refer only to holdings of 2½ acres and more; but, as the total extent of these holdings increased by over 4 per cent between 1900 and 1906, and as the cultivation of waste land has been undertaken on a large scale since 1895, there is little doubt that the total area of cultivated land in Belgium is greater to-day than ever before, and at least 12 per cent greater than in 1846. The following table shows this area at various dates. (The figures refer only to land actually under cultivation; they exclude woods and rough grazing land.)

Acres.			Acres.		
1846	.	4,401,819	1880	.	4,900,085
1856	.	4,539,267 ^(a)	1895	.	4,734,224
1866	.	4,854,654	1906	.	4,362,766 ^(b)

^(a) This area includes an estimated 2539 acres for nursery gardens, being the mean area under that heading for 1846 and 1866 (2199 and 2885 acres), and 15,354 acres for pleasure gardens, being the mean area under that heading for 1846 and 1866 (8153 and 22,556 acres).

^(b) Not including fallow lands, nursery gardens, osier beds, vineyards, kitchen gardens, or any holdings of less than 2½ acres, therefore not comparable with the previous figures.

is largely accounted for by vineyards, and in Belgium by land under crops used for industrial purposes, such as tobacco, flax, hops, and sugar-beet.¹

In view of the special importance of wheat as an article of human food, it will be worth while to separate the area devoted to this crop from the total under cereals, and to see what position Belgium occupies among her European neighbours as a wheat-growing country. The figures come out as follows:—

PERCENTAGE OF CULTIVATED AREA DEVOTED TO WHEAT—
AVERAGE FOR 1900-1904

1. France	21·2 ²
2. BELGIUM	9·1
3. Germany	5·2
4. Great Britain	5·1
England and Wales	5·9
Scotland	0·9
5. Denmark	1·0

It is interesting to note how comparatively high a position Belgium occupies, having almost twice as much

¹ PERCENTAGE OF CULTIVATED AREA DEVOTED TO VARIOUS CROPS
IN 1905

	BELGIUM.	France.	Germany.	Great Britain.	England and Wales.	Scotland.
Cereals	42·0	42·5	43·5	20·9	20·3	25·3
Roots	3·7	2·3	2·2	6·4	5·7	9·3
Potatoes	8·3	4·6	9·8	1·9	1·7	2·9
Fodder	10·0	12·8	7·3	14·5	11·3	32·1
Leguminous	0·8	1·0	1·2	1·8	2·3	0·4
Grass	25·9	29·8	25·6	53·5	57·5	29·7
Others	9·3	7·0	10·4	1·0	1·2	0·3
	100·0	100·0	100·0	100·0	100·0	100·0

² The total cultivated area on which this figure is based refers to the year 1892, since which no official estimate has been published. As there is reason to believe that the cultivated area has increased since then, the above percentage probably is an exaggeration of the real position.

of her cultivated area devoted to wheat as Germany and Great Britain, though only half as much as France.¹

But to make a true comparison between the various countries we must consider not only the crops grown but the average yield per acre. Unfortunately official statistics only allow us to compare a few of the principal products, but in these Belgium comes out extraordinarily well. With the exception of wheat, *she heads the list in every instance*, so that not merely is the proportion of land she devotes to cereals and potatoes more than twice as high as that of Great Britain, but every acre produces considerably more.²

The yields obtained in certain communes of Belgium, where the methods of cultivation are the most intensive, are truly remarkable. For instance, taking the 1906 figures, while the average yield of wheat for the whole country was 34 bushels per acre, in the commune of Oirbeek (loamy region, near Louvain) it was 57 bushels. Similarly the yield of rye in the communes of Mariakerke (East Flanders) and Grand Bigard (loamy region, near Brussels) was 50 bushels, as compared with 30 for the country generally. In Neuve-Église (loamy region, near Ypres) the yield of oats was twice the usual average ($111\frac{1}{2}$ bushels, compared with 54 bushels per acre). In Oostkerke (West Flanders, near Bruges) the growers managed upon an average to get 20 tons of sugar-beet as against $12\frac{1}{4}$ tons in the rest of Belgium, while in the







¹ The protective duty on wheat is 2s. 10d. per cwt. both in France and Germany. Belgium imposes none.

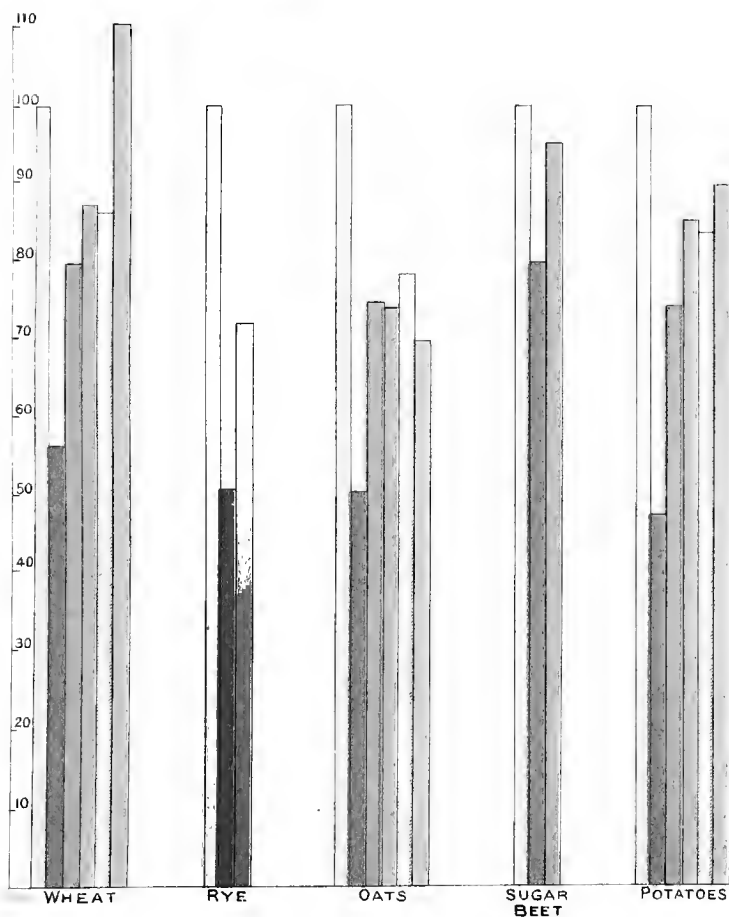
² PRODUCTION PER ACRE—AVERAGE 1900-1904

	Wheat.	Rye.	Oats.	Sugar-beet.	Potatoes.
	Bushels.	Bushels.	Bushels.	Tons.	Tons.
BELGIUM . . .	$33\frac{1}{2}$	$31\frac{1}{2}$	$54\frac{1}{2}$	12	6·7
France . . .	19	$15\frac{1}{2}$	$26\frac{1}{2}$	10	3
Germany . . .	27	23	$38\frac{1}{2}$	12	5
Great Britain . . .	30	...	39	...	5·7
England } . . .	29·7	...	41	...	5·6
Scotland } . . .	37·6	...	$36\frac{1}{2}$	...	6

YIELD PER ACRE OF DIFFERENT CROPS IN
BELGIUM AND OTHER COUNTRIES

THE BELGIAN PRODUCTION IS EXPRESSED AS 100 UNITS
IN EACH CASE

BELGIUM		GT BRITAIN	
FRANCE		ENGLAND	
GERMANY		SCOTLAND	



case of potatoes the extraordinary yield of 27 tons per acre was obtained in the commune of Audegem (loamy region, near Termonde).¹

It is well worthy of note that many of these high average yields have been obtained in Flanders, where the soil is naturally so poor that it requires constant care and high manuring to make it yield satisfactory crops at all. Almost all are from communes where the land is divided into small, and even very small holdings, a fact brought out in the table in the Appendix (page 576).

As further evidence of the intensive methods of cultivation practised by small farmers, reference may be made to the fact that they frequently produce two crops in one year from their land. These second crops are not obtained all over the country; they are chiefly found in the most densely populated districts, such as East Flanders, where the rents are very high, and the land is much subdivided. Here nearly half the soil yields two crops a year: it is indeed only in this way that the cultivators are able to pay their rents and live. The usual second crops are carrots,

¹ Other striking figures showing the high average yields are as follows :—

Commune.	Crop.	Average Yield.	Average Yield of whole Country.	Percentage Excess over whole Country.
		lbs. per acre.	lbs. per acre.	
Gonrioux (Condroz) . .	Spelt . . .	3034	1753	73
Nenfmaison (Loamy) . .	Winter Barley	4908	2477	98
Leerbeek (Loamy) . .	Summer Barley	3569	2045	75
Middelbourg (Flanders) .	Summer Barley	4015	2045	75
Hennuyères (Loamy) . .	Beans . . .	3569	2039	75
Zerkeghem (Flanders) . .	Peas . . .	4462	2119	110
St. Nicolas (Flanders) . .	Forage Beet .	102,615	49,711	106
Lombartzjde (Polders) . .	Carrots (as chief crop)	60,677	23,981	153
Afsné (Flanders) . . } Mespelaere (Loamy) } Beersel (Campine) . . }	Carrots (2nd crop)	31,234	13,888	125

These and the figures given above have been kindly supplied to the writer by the Minister of Agriculture. They refer to *average* yields for the whole of the communes named, not to exceptional yields obtained by experts on small experimental plots.

turnips, and spergule, the last being a fodder crop much used in Belgium.¹

When we turn our attention from crops to livestock, we find that Belgium has not gained her pre-eminence in the former at the expense of the latter. On the contrary, she stands at the head of the list in the number of livestock per square mile of territory. If we take eight sheep as equivalent to one head of horned cattle or to one horse,² we arrive at the following as the total number of livestock (horses, sheep, and cattle) per square mile of territory in the respective countries.

BELGIUM	180
Denmark	160
Great Britain	133
England and Wales	160
Scotland	76
Germany	117
France	95

The figures for horses, cattle, and sheep, given separately, are as under :—

NUMBER OF HORSES, CATTLE, AND SHEEP PER SQUARE MILE OF TERRITORY³

Horses.	Cattle.	Sheep.
Denmark 32	BELGIUM 156	Great Britain 285
BELGIUM 21	Denmark 120	England and
Germany 20	Germany 92	Wales 310
Great Britain 18	Great Britain 80	Scotland 235
England and	England and	France 85
Wales 23	Wales 97	Denmark 58
Scotland 7	Scotland 40	Germany 38
France 15	France 69	BELGIUM (1895). 20

¹ In 1895, 10 per cent (473,775 acres) of the cultivated land in Belgium yielded second crops. The average yields per acre were :

Turnips	7½ tons
Carrots	4½ „
Spergule	5 „

² This is the equivalent adopted by Prince Kropotkin, see *Fields, Factories, and Workshops*, cheap edition, p. 56.

³ The figures refer to 1904, except those for Denmark, which refer to

It will be noted that Belgium stands first in cattle, having 25 per cent more than Denmark, and twice as many as Great Britain, per square mile of territory. In sheep she comes at the bottom of the list, a circumstance easily explained by the fact that her waste lands are almost all covered with forest and there is comparatively little permanent pasture. Great Britain, on the other hand, heads the list in sheep, having a proportion nearly three times as great as France, which comes next, and fourteen times as great as Belgium. It must, however, be borne in mind that Belgium has more goats than sheep, whereas the number in Great Britain is insignificant. In horses, Denmark comes first with 32 per square mile, England and Wales next with 23, and Belgium third with 21. If, instead of considering the number of horned cattle per square mile, we take the number of milch cows, we find that here again Belgium heads the list with 76. Denmark follows with 71, then comes Germany with 50, and France with 36. Great Britain comes last with 30, or less than half the number of Belgium.

In proportion to her size Belgium keeps more pigs than any other European country, having 101 per square mile, although Denmark and Germany come very close with 90 and 95 respectively. France and Great Britain can only show less than half the numbers reared in the other countries.¹

All these figures point to the extraordinary intensity of Belgian agriculture. She takes the lead of the other countries on almost every point. When it is remembered that her soil is not especially good—indeed, the two

1903. The German statistics are for *all* horses, the others for agricultural horses only.

Denmark has been added to the list of countries considered. It was omitted when comparing crops, owing to the unsatisfactory nature of the available statistics.

¹ BELGIUM	101
Denmark	95
Germany	90
France	37
Great Britain	32
England and Wales	46
Scotland	5

Flanders, where the cultivation is the most intense, consist largely of sandy soil which was originally extremely infertile,—we realise that her high position is due to other causes; and, to suggest one of these, we cannot fail to be struck by the great contrast between the small farms and high yields of Belgium, and the larger farms and lower yields of Great Britain.¹

It will be interesting to inquire how far Belgium's intensive agriculture enables her to feed her teeming population, and how far she is dependent upon outside sources for her food supply.

Comparing the past with the present we find that she feeds a smaller proportion of her population now than formerly. The census figures of yield per acre show that although the production of cereals of all kinds increased between 1846 and 1895 by about 20 per cent,² the production of wheat (including spelt and meslin³) decreased by 10 per cent, notwithstanding the better yield per acre. During these fifty years the population of Belgium had increased by 47·6 per cent. Thus the production of cereals *per head of the population* dropped from 613 lbs. in 1846 to 503 in 1895, and the production of wheat (including spelt and meslin) from 238 to 144 lbs. On the other hand, the production of sugar-beet rose from 39 lbs. in 1846 to over 456 in 1895, and the crop of potatoes from 838 lbs. in 1846 to 992 in 1895, per head of the population. These two great increases, especially the great development of the sugar industry, providing as it does an important article of food, must not be forgotten when considering the decreases in the production of cereals.

¹ The development of agriculture in Denmark may not appear remarkable from an examination of the various tables given above; but when the sparseness of her population is taken into account, the great agricultural activity of the Danish people becomes evident. For instance, Denmark has 442 milch cows per 1000 of her population, against 127 in Belgium and 70 in Great Britain. Again, Denmark has 563 pigs per 1000 of her population, against Belgium with 146. Great Britain has only 78, or about one-seventh of the number for Denmark.

² Between 1846 and 1906 the increase was 40 per cent, but the 1906 figures take no account of cereals grown on holdings of less than 2½ acres.

³ Meslin (*méteil*) is a mixture of wheat and rye.

Turning now to livestock, we find that in 1846 there were 278 head of horned cattle per thousand of the population, while in 1895 there were only 222. The number of sheep dropped from 153 to 37, while on the other hand the number of pigs rose from 114 to 182, and that of goats from 25 to 40, per thousand of the population.¹

The above figures show that although the agriculture of Belgium is extraordinarily intensive, and enormous progress has been made during the last half-century, the proportion of her population engaged in industry has developed at an even greater rate than her agriculture.

Her increasing dependence upon foreign countries for her food supply is clearly shown by an examination of her imports and exports. In the official statistics constant changes have been made in the classification of the different food-stuffs, and a comparison for a period of years cannot be drawn without corrections which necessitate laborious calculations. The writer has made these corrections for the period between 1881 and 1905, and has obtained some interesting results. Comparing the quinquenniums 1901-1905 with 1881-1885, we find that the net imports of *corn* rose from 766,000 to 1,982,000 tons, or from 304 to 637 lbs. per head of the population.² In the same period the imports of livestock (oxen, cows, sheep, and pigs) rose from 201,000 to 227,000 head, of fish from 29,000 to 44,000 tons, of eggs from 10 to 66 millions, and of butter and cheese from 8 to 11,000 tons. In short, among agricultural products, only in the case of horses, vegetables, and sugar were the imports less or the exports greater in 1901-1905 than in 1881-1885.³

If, instead of comparing Belgium's present with her

¹ There is a protective duty on sheep and horned cattle, but pigs and goats are admitted into the country duty-free. (See p. 156.)

² It should be stated that 39,275 tons of flour were exported in 1901-1905, against 12,386 tons imported in 1881-1885.

³ Full tables showing the agricultural imports and exports of Belgium during the years 1881-1905 will be found in the Appendix, p. 577. As explained above, these figures do not coincide with those in the official returns, as they have been corrected to allow for differences in the method of classification.

past, we compare her ability to feed her people with that of the United Kingdom, she comes out very well indeed. In Belgium the value of food imported (deducting that exported and not including exotic products such as tea, rice, etc.) amounts to an average of £1:18:2 per head of the population per annum. In the United Kingdom¹ the corresponding figure is no less than £3:14:10, notwithstanding the fact that Belgium has a population of 589 persons per square mile, and the United Kingdom only 342.²

Let us now analyse the figures of production and imports for Belgium and the United Kingdom, taking in all cases the average of the years 1901-1905 as the basis of calculation. During that period each country supplied about the same proportion of her total cereal requirements by home production ($46\frac{1}{2}$ per cent in Belgium and $42\frac{1}{2}$ in the United Kingdom). But the requirements of Belgium are enormously greater than those of the United Kingdom, since not only is the population much denser, but the consumption of cereals for all purposes amounts upon the average to 1157 lbs. per head of the population, as compared with only 707 lbs. in the United Kingdom.³ Thus we see that although the United Kingdom supplies as large a *proportion* of her total requirements as does Belgium, the actual weight of cereals produced per square mile of total territory is three times as great in the latter as in the former, namely, 2915 as compared with 970 cwts.

The comparison between the two countries is also striking if, instead of taking all the cereals together, we

¹ No figures of imports and exports are available for Great Britain, excluding Ireland.


² The above figures are the averages for the years 1901-1905. Corresponding figures for Germany are 17s. 11d., and for France 4s. The populations of these two countries per square mile are 290 and 191 respectively. The low food imports for France are partly explained by the small population per square mile. In Denmark, with a population of 172 per square mile, the excess of *exports* over *imports* amounts to £3:13:10 per head of the population, a figure contrasting strongly with that of France, although the population per square mile is very similar in the two countries.

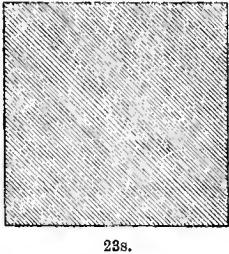
³ This figure is arrived at by taking the average production as given in the agricultural statistics, and adding the excess of imports over exports, and then dividing by the mean population.

NET IMPORTS OF AGRICULTURAL PRODUCE PER HEAD OF POPULATION IN
BELGIUM AND THE UNITED KINGDOM (EXCLUDING EXOTIC FOODS).


Belgium.

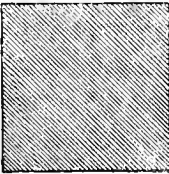
United Kingdom.

Livestock and meat. 
1s. 8½d.



23s.

Dairy produce. 
2s. 8d.



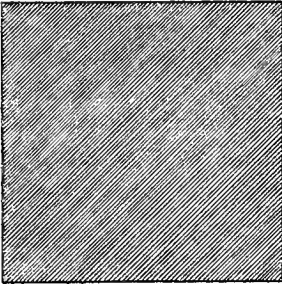
12s. 9d.

Eggs. 
7d.

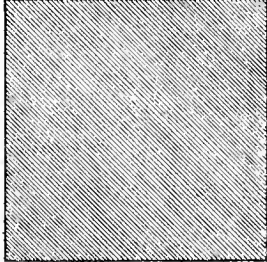


3s.


Cereals and derivatives.





35s. 8d.




131s. 6d.

Fruit. (EXPORT.) 
1s. 4½d.

 2s. 6d. (Import.)

Vegetables. (EXPORT.) 
8d.

 2s. 1d. (Import.)

Net imports per head of population 38s. 2d.
Population per sq. mile 589

74s. 10d.
342

consider wheat alone. Although in Belgium the per capita consumption of wheat is 511 lbs. per annum, as compared with 359 lbs. in England and Wales,¹ and the density of population 589 per square mile as compared with 558, the percentage of the total wheat requirements supplied at home is almost the same, namely, 22 per cent in Belgium and 25 per cent in England and Wales, the explanation being that Belgium produces nearly 650 cwts. of wheat per square mile of her territory, as compared with 450 in England and Wales.

No matter what item of her food supply is considered, Belgium's exceptional ability to feed her people is manifest. For instance, comparing the net imports (that is, the excess of imports over exports), we find that Belgium imports livestock and meat to the amount of 1s. 8½d. per head of the population per annum, against 23s. for the United Kingdom. She imports dairy produce (butter and cheese) to the value of 2s. 3d. per head, as compared with 12s. 9d. for the United Kingdom, and eggs to the value of 7d. per annum, against 3s. for the United Kingdom. Of fruit, excluding exotic, the United Kingdom's imports amount to 2s. 6d. per head, whereas Belgium *exports* fruit to the value of 1s. 4½d. per head. An equally wide difference is to be found in the case of vegetables, the United Kingdom importing 2s. 1d. worth per head, whereas Belgium *exports* 8d. worth per head. In these figures we are not comparing Belgium with England and Wales, but with the whole of the United Kingdom, including Ireland.²

The figures just given cannot be accounted for by differences in the prices of food-stuffs, which, as shown in Chapter XXIV., are very similar in the two countries; nor can they be accounted for by differences in the per capita consumption of the various articles. Certainly the Belgian

¹ England and Wales are compared with Belgium in the case of wheat, because, owing to climatic conditions, very little wheat is produced in Scotland.

² For purposes of further comparison we give the following table, which includes many of the figures referred to above, and also compares France, Germany, and Denmark. In making these comparisons, the fact of the

eats less meat than the Briton, but, on the other hand, he consumes more vegetables (see p. 190) and more grain.

Nor can protective tariffs be called in to solve the problem, the difference between the two countries being as striking in the case of eggs and vegetables, which are unprotected, as of meat and dairy produce, which are protected.

In the face of such figures, it is astonishing to hear serious-minded men stating that agriculture in England can hardly become much more intensive. The experience of Belgium, with her comparatively poor soil, and with a climate no better than that of Britain, is sufficient refutation of such a view. Rather than adopt it, let us seek to learn from Belgium the secrets of her agricultural achievements. Undoubtedly she possesses, especially in Flanders, a race of born agriculturists, but this alone would not explain her success. In accounting for it, we must remember her light railway system, her methods of agricultural co-operation,

greatly differing density of population in each country must never be lost sight of.

NET IMPORTS AND EXPORTS OF AGRICULTURAL PRODUCE PER HEAD
OF THE POPULATION—
AVERAGES FOR THE FIVE YEARS 1901-1905

	United Kingdom.		Belgium.		France.		Germany.		Denmark.	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
	s. d.		s. d.	s. d.	s. d.	s. d.	s. d.		s. d.	s. d.
Horses . . . . .	...	...	...	1 8½	...	2	1 5	...	...	5 10
Other Animals . . . . .	...	...	3 2	...	5	...	1 9	...	...	6 9
Meat	23 0	...	3	...	6	...	1 8	...	...	35 0
Butter	9 9	...	} 2 3	...	...	1 0½	*	...	...	46 0
Cheese	3 0	5	...	*
Eggs	3 0	...	7	...	...	3½	1 11	...	...	10 9
Cereals and Derivatives }	31 6	...	35 8	...	10½	...	10 5½	...	28 2	...
Fruit	2 6	...	...	1 4½	*	...	*	...	*	...
Fruit, Exotic	3 6	...	7 3	...	4 3	...	10½	...	2 8	...
Vegetables	1 3	...	...	8	...	5½	*	...	*	...
Potatoes	10	...	*	...	...	6	*	...	5	...
	78 4	...	45 5	...	4 0	...	17 11	...	...	73·1

* The imports nearly balance the exports.

and the means taken to educate her farmers. But all these are of secondary importance when compared with the fact that her large estates have been broken up, and her agriculture entrusted not to a few large farmers, but to an army of peasants working their farms themselves, with the aid of their own families. That in spite of the extraordinary yields they obtain, the recompense of the peasants in Belgium is often not commensurate with the severity of their labour, is due to conditions dealt with elsewhere.

CHAPTER XV

MARKET-GARDENING

BEFORE leaving the subject of Belgian agriculture, some consideration must be given to market-gardening, a department of agriculture (using this word in its widest sense) which is daily assuming greater importance in the densely populated countries of Western Europe. So rapid has been its development in Belgium in recent years, that she is now able not only to provide her own population with vegetables and fruit, but to export annually £230,000 worth more vegetables and £480,000 worth more fruit than she imports, her exports being almost entirely to England.¹ The fact that during the years 1901 to 1905 the United Kingdom imported, on an average, vegetables to the value of £2,638,787 per annum more than she exported,² shows how far Belgium has outstripped her in market-gardening, and what scope the United Kingdom affords for the extension of that industry.³ The contrast is the more remarkable when we remember that the population

¹ These figures are averages for the years 1901 to 1905 ; they do not take into account exotic fruits, such as oranges, lemons, etc. For detailed figures of Belgian imports and exports, see Appendix XIII. p. 577.

² Not including potatoes, imported to the average value of £1,841,740 per annum.

³ Assuming the value of market-garden produce to amount to £50 per acre per annum, the above figures show that if the United Kingdom produced all her own vegetables (and there is no reason why she should not) the industry would occupy about 52,776 acres ; and on the assumption that one man, with occasional help from the members of his family, could cultivate 5 acres, additional work would be found on the land for about 10,500 men.

The above calculation refers solely to vegetables and does not include fruit.

of Belgium is 589 per square mile, and that of the United Kingdom only 342. Moreover, the average consumption of fruit and vegetables per head of the population is not less, as might be imagined, but greater in Belgium.¹

How is it that Belgium's market-gardening has developed so wonderfully as compared with that of Great Britain? Certainly, as regards vegetables, it is not due to protection, for these have always been admitted into Belgium duty-free.² Nor has she any advantage in climate; in this respect there is very little to choose between the two countries. But market-gardening is only a form of intensive agriculture, and we have already seen that the Belgians cultivate almost the whole of their soil much more intensively than the British. When the cultivation of soil becomes so intensive that individual care is given to every plant, it is no longer called farming, but gardening, and this is what is occurring in Belgium. The development of market-gardening takes place in those regions where ordinary farming is already being carried out upon intensive methods. Gradually the farmers—determined to extract the utmost value from the soil—allot a portion of their holdings to market-garden crops. Finding that these pay better than ordinary farm produce, they little by little relinquish the latter, and become full-fledged market-gardeners. This transition can be seen in different provinces. In the neighbourhood of Louvain, for instance, where, as a result of more intensive culture in ordinary farming, "three bags of rye are harvested for every two bags twenty years ago," market-gardening has perhaps made more progress than anywhere else. In another commune, four-and-a-half miles from Louvain, there is now hardly a farmer who does not

¹ This view is borne out by a comparison of the working-class expenditure on food as shown in budgets obtained by the writer in the two countries. The total sum spent during the week for all vegetables by ten working-class families in York was 5s. 10d. In the same number of working-class budgets obtained in Belgium the total sum expended on vegetables in one week was over 16s., and there is no reason to suppose that these cases are in any way exceptional.

² There is a tax of 1d. per lb. on all fruit imported into Belgium, except fresh apples, which are imported free.

produce some vegetables for the market, a state of things utterly unknown thirty years ago. It is only fifteen years since the cultivation of asparagus was introduced into this commune; now more than fifty people grow it, and the number increases every year. In an adjoining commune, only five or six of the small holders grew asparagus and peas fifteen years ago; now almost every one has a small patch of these crops, about 150 acres being under asparagus, and another 150 under peas, not to speak of land devoted to other vegetables. It would be easy to multiply illustrations: how Bressoux, a commune on the fringe of Liège, which in the eighties had only farms, is now laid out in market-gardens; how in a commune in the north-east of Malines the past twenty years have seen cereals crowded out by carrots, cauliflowers, and green peas, while on almost every holding hothouses are being erected. Thus we see that the development of market-gardening is the natural outcome of the intensification of agriculture which dates largely from the agricultural crisis caused by the introduction of cheap American wheat, and is intimately connected with the great subdivision of the land. Indeed, without the latter it would not have been possible.

It is difficult to ascertain the exact yield which market-gardeners obtain from their land; for, unfortunately, the keeping of accounts is almost unknown among them. "I should be surprised," said the secretary of one of the chicory growers' associations, "if ten of our three hundred members could tell you at the end of the year how many baskets they had despatched." But careful enquiry on the spot and discussion with men well qualified to judge show pretty clearly that the average yield obtained from the land is not phenomenally large. Certainly the writer has seen nothing at all to compare with the wonderful culture practised in the neighbourhood of Paris.

In this connection the following figures, kindly furnished by M. Pierre Depireux, a lecturer at the Liège Horticultural College, are interesting. They represent yields actually obtained by him from his garden near Liège. It will be

noted that he succeeds in extracting two, and in one case three, crops per annum from his land.

Plots.	Crops (one following the other on the same ground).	Yield per acre.	Value.	Total Yield per acre per year.
I. . {	Lettuce	36,400 heads	£ 57	} 76
	Leek	48,600 heads	19	
II. . {	Lettuce	32,400 heads	65	} 130
	Celery	16,200 heads	65	
III. . {	Onions	259 cwts.	53	} 66
	<i>Doucettes</i>	?	13	
IV. . {	Cauliflowers	6000 heads	29	} 62
	Spinach	?	33	
V. . {	Celery	101,200 heads	162	} 175
	<i>Doucettes</i>	?	13	
VI. . {	Early potatoes	119 cwts.	29	} 72
	Spring spinach	?	10	
	Endives	16,200 heads	33	

The yields are here shown per acre, but each plot was less than an acre in extent.

The following estimates of average yields have been furnished by M. Gillekens, Professor at the Gembloux Agricultural College:—

Green peas . . .	64 to 80 cwts. per acre, worth ?
Asparagus . . .	. 40 cwts. " " £81
Onions . . . . .	. 200 cwts. " " £32
Red cabbages . . .	8000 heads " " £32
Cauliflowers . . .	8000 heads " " £32
Leeks	101,200 heads " " £40

None of these yields are abnormal; many an English market-gardener gets as much, or more, from his land. But the Belgian arranges his crops so cleverly that, whether late or early, they come in just out of season, and thus command a high price; and he contrives to have his land constantly yielding something. Moreover, he utilises every inch of soil, and this alone, according to successful market-

gardeners all over the country, often makes the difference between profit and loss.

Two other factors which contribute to the success of Belgian market-gardening must be mentioned. First, there is the erection of vegetable-preserving factories, which provide excellent outlets for the produce in the neighbouring districts;¹ and, secondly, local specialisation upon certain crops. Thus Louvain specialises on early, and Malines on late cauliflowers; both come in when there is a scarcity of this vegetable, and the growers in these districts send to all the Belgian and some foreign markets. Again, the forcing of early strawberries is largely practised around Brussels and Namur. Men who specialise in one or two crops naturally learn how to produce them to the best advantage, and when a whole district becomes famous for a certain product, buyers go there, and marketing is made easier. The communes of Hoeylaert, and Overysse near Brussels, are striking examples of specialisation, having long been noted for their grapes, which are exported in enormous quantities to England. These communes, seen from a distance, look like cities under glass. The growers now complain of over-production and diminished profits, but the industry is still prosperous enough to induce men to build an ever-increasing number of greenhouses. Those who begin with two or three houses, which they manage themselves, with the aid of their families, in course of time become possessed of large establishments, and this in spite of the fact that the method of heating the houses is extraordinarily elementary. Hot water is seldom used, but the smoke and hot gases from the furnaces are conducted through earthenware pipes! The loss of heat and waste of coal involved in such a method must be very great.

Speaking generally, it may be said that market-gardening in Belgium is fairly prosperous, and the writer came across a number of very successful cases. One man, for instance,

¹ The output of these factories in 1903 was returned as 60,500 cases, each containing 100 half-litre (0·88 pints) tins (*Notice sur l'Economie Rurale*, prepared for the Liège Exhibition, p. 903).

who began with practically no capital, has now over £400, and has in addition provided liberally for some of his married children. Another, one of the best-known growers of cauliflowers in Louvain, was formerly a bricklayer's labourer. By careful selection of the best plants he won great renown for the excellence of his produce, and his establishment now extends over 40 or 50 acres, of which about 25 are under cauliflowers each year. In another district the owner of a most comfortable home said that when he married he possessed 35s. 8d., but that his debts amounted to 65s. 7d. At first he worked as a labourer, devoting his spare time to the cultivation of a plot of just under an acre which he rented. Little by little he increased his holding, and after five years bought property to the value of £120, of which he paid £108 in cash. After nineteen years he bought more property for £680. He had had twelve children, of whom ten were living; two of his sons were priests, and the third was to enter holy orders. He had about 32 acres of land of his own, upon which he had spent some £1600 in buildings and improvements, besides providing three of his married children with houses and a little land. Asked whether he had earned all his money or had received any legacy, he replied that he had only received one legacy of 21s. 6d., but the legal expenses in connection with it were 18s. 6d., and to the 3s. which remained he added another and bought a rat-trap! All the rest of his possessions he had earned as a market-gardener.

But even these men who had prospered could not tell what yield they obtained from their land; they only knew that they had done well.

Such cases are exceptionally successful, but a market-gardener generally makes a living, too often, it is true, by dint of excessively hard toil, in which his wife and children join. In busy seasons it is by no means unusual for work to begin at three or four in the morning, and to continue, with brief interruptions, until eight or nine at night. The expression "a dog's life" became strangely familiar in the course of conversations with market-

gardeners. "If I had any sons," said one man in a suburb of Liége, "I would far rather have them become miners than market-gardeners; they would not have to work so hard, and they would earn more than I do."

But it is partly the Belgian market-gardener's own fault that his life is so hard, for the strain might be much reduced by the adoption of co-operative methods. Even if these did not affect the prices obtained and profits realised, they would materially shorten his working hours. There are associations for the sale of grapes and of chicory—a vegetable held in high repute in Belgium and France—but with these exceptions the produce is disposed of by means involving an enormous waste of labour. There are, of course, real difficulties in the way of co-operative sale; the market prices vary from day to day, and the produce from different cultivators is of unequal quality, so that absolute confidence in the salesman would be a *sine qua non*.

At present a hurrying *mêlée* of carts of all descriptions, drawn by men, women, dogs, donkeys, ponies, or horses, can be seen any morning on the roads leading into the large towns, each cultivator trying to get a good place at the opening of the market. The consignments are often ridiculously small, and a person who might be doing valuable work in the garden spends the best part of the morning in selling a few shillings' worth of produce. The early market in Brussels is an interesting sight. It belongs to the municipality, which levies a small toll on every basket of goods offered for sale. As early as two or three o'clock rows of country carts may be seen standing in the streets leading into the *Grand' Place*, while on the foot-paths of the square are groups of women, who have reserved the stands they wish to occupy by putting down straws or cabbage leaves. They are not allowed to take their stand until the signal is given, when they rush to their places and secure them finally by depositing baskets upon them. A few minutes later the signal is given for the carts to enter, and for about ten minutes there is a general turmoil

while most of the goods are unloaded. Buying and selling immediately begin, wholesale dealers and restaurant-keepers being among the first buyers. The market closes at nine o'clock. The fruit market is carried on in a similar manner in another square, grapes and exotic fruit being offered in special sale-rooms. This system of marketing, although so wasteful of time, appears to give a fair chance to all the different classes of sellers.

The market-gardener is also handicapped by a certain conservatism of nature which has withheld him from adopting scientific methods of cultivation. He has preferred plodding on laboriously, as others did around him, to listening to the lecturers sent out by the Government, in whose theoretical teaching practical growers are apt to place small faith. He is, however, gradually becoming more receptive of new ideas. The value of chemical manures and the possibilities of steam heating of soil where stable manure is expensive are better understood, and even Government lecturers are now comparatively popular!¹ By the free provision of advice through the State agricultural experts and of subsidies to horticultural shows, the Government is doing what it can to foster the market-gardening industry.

But an even greater element of hardship in the lot of the market-gardener is the high price or high rent of his land, a rent of £8 per acre being by no means exceptional.² The more successful he is the greater is the rent demanded from him, and the harder must he work to pay it. These conditions, of course, are not peculiar to him, but perhaps the fact is brought out even more strikingly in his case than in that of the ordinary farmer. A few illustrations will emphasise this point. In selecting these, cases have been avoided where the rise in values might be explained by the

¹ Evidence of the increasing attention devoted to the most up-to-date methods of market-gardening may be gathered from a perusal of the Report of a Conference on Horticulture, held in Liège in 1905.

² It would appear that market-gardening, as carried on in Belgium, cannot be made to pay if the rent greatly exceeds this figure. Far higher rents are paid around Paris, where the cultivation is much more intensive.

demand for land for building purposes. The instance of Wavre Sainte Catherine, near Malines, is probably typical; twenty-six years ago good land in this commune could be bought for £50 an acre, and now the price is £200. Market-gardening here dates back about ten years, and has developed with extraordinary rapidity. The soil is exceptionally good, and the number of greenhouses for the intensive cultivation of strawberries, tomatoes, and salads has doubled in the last five years. Similar cases are those of Dilbeek and Beggynendyck, where the price of land has doubled in ten years; and the same thing is happening throughout the country.

As in all other branches of agriculture, the very success of the workers militates against them. Prosperity means that more people seek to enter the industry, causing a greater demand for land, which raises the rent or price, as the case may be. Every improvement in method which increases the yield has this indirect result, and though the first to use it will profit for a time, it is doubtful how far it will permanently benefit market-gardeners as a class. Thus the objection felt by some of them to the efforts made by the Government to extend the knowledge of scientific methods of culture can be readily understood. They fear that as soon as the special knowledge they possess becomes common property, the advantage they receive from it will be absorbed in land values.¹

This chapter would be incomplete without some reference to the horticultural industry, which centres principally around Ghent. In the environs of that city there are over 700 horticultural establishments, covering more than 3000 acres of land, and one can walk for miles along lanes with glass-houses on either side. Palms, azaleas, rhododendrons, and laurels are the principal plants grown, but, of course, the industry is not confined to these. About half the

¹ It may be urged that a protective duty on vegetable produce would help the market-gardener. What is stated above points, however, to the conclusion that the benefit would ultimately accrue to the landlord. So far as the market-gardener is concerned, it would operate in exactly the same way as any discovery which tends to make the industry more profitable.

establishments are quite small ones, managed without paid help; others are very large, some covering as much as 60 acres or more. A large export trade is done, principally to the United States, France, Germany, Great Britain, and Scandinavia.

The horticultural industry affords an interesting example of land monopoly in a rural district; for foreign buyers have acquired a habit of visiting one particular part of the region round Ghent more than others, and in that district growers can sell their goods more readily. In consequence of this the price of land within it is five times as high as that of equally good and equally accessible land in the immediate neighbourhood; indeed as much as £800 an acre is sometimes paid, and this although the land is five miles from Ghent. But wherever horticulture establishes itself the price of land rises, and all developments in the industry ultimately lead to this result.

CHAPTER XVI

THE AGRICULTURAL POPULATION

IN the preceding chapters we have been concerned with Belgian agriculture. The present one will be devoted to a description of the farmers and labourers themselves, the proportion their numbers bear to the rest of the population, and the conditions under which they live. It is often maintained that the life of the small holder is one of unending toil: it will repay us to find out how far this is true of this country of small holdings, and whether, if it is the case, it is due to removable causes or is a necessary consequence of the system.

There are two official sources from which information regarding the number of persons habitually engaged in agriculture in Belgium may be drawn. According to the Agricultural Census of 1895 it was 1,204,810; but the General Census of 1900 only gave it as 697,372. The former estimate is certainly too high, for it includes large numbers of industrial workmen and their wives, who cultivate a small plot of land, although the profit derived from it is a comparatively unimportant part of their total income. On the other hand, the figure 697,372 is certainly too low, for it only includes a small number of the women who help their husbands on the farms. Wherever small holdings are found the work of the women is an important item, and statistics which omit a large number of these workers give an inadequate idea of the actual facts. The writer has made a close examination of all official records, and discussed the

matter with the Government officials in the two departments responsible for the censuses. He has found that there is not sufficient information to enable him to form a trustworthy estimate of the actual number of persons engaged in agriculture, although he is convinced this must lie somewhere between seven and twelve hundred thousand. He has therefore decided, for the purposes of this chapter, to adopt the figures of the 1900 census, viz. 697,372. His arguments would have been strengthened by the adoption of a higher figure; but at any rate all statements made are well within the mark.¹

Starting then with the lowest estimate of 697,372, we find that this represents about 15 per cent (14·8) of the total population over twelve years of age,² and about 23 per cent or nearly a quarter of the total number of occupied persons in the country.³ The proportion of agriculturists to the total population has decreased considerably during the last fifty years, a result to be expected from the extraordinary development of industry which Belgium witnessed in the 19th century. But in

¹ A detailed examination of the two Censuses will be found in the Appendix, pp. 578-580.

² There are no figures which purport to show the *total* agricultural population including children. The figure of 697,372 only refers to those *actually engaged in agricultural work*, without any regard to the number of persons depending upon them.

³ BELGIAN CENSUS OF OCCUPATIONS

Occupation.	Year of Census.	Men.	Women.	Together.	Percentage of total.
Agriculture . . .	(1900)	533,665	163,707	697,372	23·1
Industry ^(a) . . .	(1896)	860,000	270,000	1,130,000	39·0
Commerce . . .	(1900)	248,336	136,900	385,236	13·0
Liberal professions	(1900)	205,207	61,449	266,656	9·0
Various occupations	(1900)	222,004	247,210	469,214	15·9
Total . . .		2,069,212	879,266	2,948,478	100

^(a) The figure here given is that of the Industrial Census of 1896. The number of persons engaged in Industry in 1900, according to the General Census, was 1,370,000, but there is reason to believe that the lower figure approximates more nearly to the truth, as secondary industrial pursuits were not taken into account to the same extent in 1896 as in 1900.

view of the experience of Great Britain, which will be referred to later, it is instructive to note that the actual number of Belgian agriculturists has considerably increased during the last fifty years. At the present time Belgium has 95 persons engaged in agriculture for every square mile of her cultivated area.

Unfortunately, as we have seen, the census figures regarding women thus occupied are incomplete, but there is not the least doubt that their number is very considerable, probably more than three hundred thousand. "*La fermière peut faire sortir de la ferme dans son tablier plus que le laboureur peut faire rentrer avec quatre chevaux,*"¹ says an Alsatian proverb, and this fact is so fully recognised in Belgium, especially in those parts where dairy-farming is largely practised, that no one blames a farmer who remarries within three or four months of his wife's death. Small farms managed by widows or single women are not infrequently met with, but those where there are no women to help are rare.

In considering the standard of comfort among the Belgian small holders, it is important to know whether the stress of poverty makes it necessary for women to engage in the hard manual labour that in England is left to men, or whether their work is comparatively light. Of course the answer varies. In the case of well-to-do farmers, the women do only the very lightest work, such as the supervision of the dairy. But, generally speaking, in addition to their domestic duties they undertake the dairy work, the care of the poultry, feeding of calves, and the lighter tasks in the fields, such as weeding, hoeing, thinning, tying corn into sheaves and making stooks, etc. In the case of market-gardeners it is the women who clean the vegetables and tie them into bunches, and take them to market and sell them; and often they have to start very early, perhaps at three o'clock in the morning, to secure good places in the market.²

¹ "The farmer's wife can take more out of the farm in her apron than the ploughman can put into it with a four-horse team."

² See p. 195.

Occasionally they have heavier work, such as spreading manure and lifting turnips. At Thourout, for instance, lives a farmer who has six daughters and no son; and the girls do all the work of the farm, and are said to be most skilful ploughwomen! Again, in districts like Flanders and Hainault, the spring exodus of about fifty thousand men to work in the fields of France leaves the women to do all the work of the small holdings during the absence of their husbands or brothers. In general, then, it may be said that the large share they take in the farming is not indicative of extreme poverty, but is characteristic of a system of small holders. In certain districts girls who have had a better education are beginning to look down upon agricultural work, but this tendency is, fortunately, not wide-spread.

The next point in the census which claims attention is the very small proportion of agricultural labourers. Only 35 per cent of the agricultural workers in Belgium are paid labourers, while 65 per cent are farmers (either tenants or owners), or members of their families.¹ Two-thirds, therefore, of the agriculturists have a direct interest in the success or failure of their work, a fact which probably goes far to explain the great development of agriculture in Belgium; and it must be further remembered that by no means all those who are returned as paid agricultural labourers will remain such. The great majority of them are already cultivating plots of land on their own account,

	Total. (a)	Percentage of Total.
¹ Farmers, and the members of their families who take part in the agricultural work	449,902 (b)	64·52
Labourers	247,470	35·48
	697,372	100

(a) From the General Census of 1900.

(b) Of the farmers and their families 76 per cent are male and 24 per cent female, while of the labourers 77½ per cent are male and 22½ female.

and evolving into independent farmers. The sons of small cultivators, for whom there is not sufficient employment on their fathers' farms, often begin by working elsewhere for wages, but as soon as they can scrape together enough money they hire a little land, which they cultivate in the evenings and on Sundays, their wives, if they are married, looking after it in their absence. Frequently their employers lend them the implements and horses necessary for tilling their plots. Little by little, as they save money and as opportunities offer, they add to their holdings. At first they work every day for their employers, then, as the claims of their own land become more urgent, they work part time for wages and part time for themselves, until eventually they are able to buy, or more often rent, enough land to maintain them entirely. Thus agricultural labour in Belgium, being so often only a transition stage, is not characterised by hopelessness and lack of outlook as it is in Britain, where few labourers ever become independent farmers, and where wages are never high enough to make adequate provision for a comfortable old age.

Certainly, while it lasts, the lot of the Belgian labourer is not an enviable one, for the hours are long and the pay small. Wages vary greatly from district to district; they are as low as 1s. 2d. a day without food, and even less, in some parts of the north-west of Belgium, rising to 2s. and 2s. 5d. in the south-east. Taking the country as a whole, it may be said that the most common wage varies from 1s. 2d. a day with food to 1s. 7d., or a little more, without food.¹ Very often this is supplemented by perquisites of one kind or another, such as the free use, or the use at a very low rental, of a little potato land, and the free loan of horses and implements for its cultivation. There is often piece-work, too, during certain periods of the summer, when higher pay may be earned. In some districts harvest wages are still paid in kind, the labourers

¹ In 1895, according to the Agricultural Census (p. 413), the average wages for men were 1s. 7d. a day without food, and 1s. with food. Women received 1s. and 7d. The lowest wages were in Limbourg (1s. 2d. and 8d. for men), and the highest in Namur (1s. 11d. and 1s. 3d.).

having a right to a certain proportion of the corn harvested, which varies from district to district—in some parts rising to one-eleventh, falling in others to one-nineteenth.

Were it not for the plots of land which the labourers cultivate on their own account, they would obviously not be able to maintain a family, especially where part of the meagre wage is given in the form of food. In these cases certainly the men themselves are usually well-fed, often receiving bacon with three of their meals; but they have only $9\frac{1}{2}$ d. or 1s. 2d. a day in addition. Their little plots of land, however, yield potatoes and other vegetables, their goats provide milk and their fowls eggs. And so, in spite of their low wages, while their lives are hard and their standard of comfort is necessarily low, it can seldom be said that their families actually suffer want.

Many employers take considerable trouble to help their labourers to a state of independence. One farmer visited by the writer regularly advances money for the purchase of stock in the autumn, waiting to be repaid (without interest) in the spring, when it has been fattened and sold. Others lend money at low rates of interest, to enable their men to take a little land on their own account.

A certain number of farm hands "live in," receiving wages which vary greatly from district to district, and also according to the special work they do. On a large farm it is usually the most responsible workers who live in, such as the horsemen and cowmen. The lowest monthly wage which the writer came across when visiting a great number of farms in all parts of the country, was in the Campine, where 16s. a month was paid. The highest was 48s. a month, paid in the Ardennes. The most ordinary monthly wage is 28s. to 36s. As a rule the men sleep in the stable or cowshed, in a wooden box about five feet from the ground. The state of their bedding and the rough shelter strike a stranger as most comfortless, but they are used to it, and do not complain.

Although the wages of agricultural labourers are still very low, they have risen within the past few years. This

is partly due to the facilities offered by the railways, which enable men to work in the towns, while continuing to live in the country. Enormous numbers of villagers take advantage of the cheap workmen's tickets, and leave their homes early in the morning, returning late at night, or, if that is impossible, spending the Sundays at home. This custom is prevalent all over the country, and often as many as fifty men will go daily from one little village. In consequence, there is almost everywhere a scarcity of agricultural labourers, and a steady tendency for wages to rise. This state of things is accentuated in the Flemish provinces, as has already been noted, by the yearly migration of forty or fifty thousand men, who go as agricultural labourers to France for the summer months. These *francsmannen*, as they are called, usually leave in companies of a dozen or twenty, one of whom acts as captain of the band. While in France they live in barns or outhouses, and work amazingly hard. They are paid almost entirely "on piece," and often earn 8s. or more a day. They begin in the spring with the thinning out of beetroot, then come the hay and corn harvests, and, finally, the gathering in of the beetroot. The leader of each group of *francsmannen* receives payment for the work done by the whole of his company, and this is shared among them. At the end of the season they return to Belgium with their savings, often amounting to £20, £24, £28, or even £32. It is not an uncommon occurrence in the summer time to visit a village in Flanders from which almost every able-bodied man has departed, the work at home being carried on by the women, children, and old men. The complaint is sometimes made that this annual migration to France is injurious to the morals of many of those who go: they are away from home and from public opinion, and get into bad habits which they bring home with them. However this may be—and we must not forget, on the other hand, the widening of thought which comes from travel in a foreign country—the fact remains that many a small holder in Belgium has established himself with the high wages earned year by

year in France. One naturally asks the reasons for this exodus of forty or fifty thousand men, which reminds one of the annual seasonal emigration of Irish labourers to England and Scotland. The chief reason is undoubtedly that wages are higher in France than in Belgium; and, moreover, many of the French farms are so large that a group of workmen will find employment on one farm for many weeks at a time. The fields, too, are large, and there is nothing to prevent a man from getting on at a great rate, and thus earning high wages. It is said also that French farmers are not so hard to please as the smaller Belgian farmers, who demand very thorough work!

To help the reader to realise the life of the Belgian agricultural labourer, an extract from the writer's notebook is here given:—

AGRICULTURAL LABOURER. LOAMY REGION

On entering this labourer's house we found the wife hard at work washing. She was evidently too busy to tidy up, for boots and bread, lamp and frying-pan, were reposing peacefully on the table together. One noted that the floor was not tiled, but of beaten earth.

The woman, a good, hard-working soul, who deserved an easier life, told us something of her circumstances, after apologising for the confusion in the kitchen. No wonder things were in a muddle for she had six children to look after, the eldest thirteen and the youngest only three months old. They were often left alone in the house, for she was known as "the strongest woman in the village," and her services were in great request for washing, and also for working in the fields, by which she earned 9½d. a day and her food, or a shilling without food. For a short time each year, however, she earned much higher wages—65s. in twenty-one days by working on piece among the sugar beets.

She told us that the children could not go to school very regularly as they had to help at home in her absence; she came back from her work to suckle the baby three times a day. She worked right up to its birth, and began again a fortnight later—that was what had lamed her. Asked what she thought of her work and her life, she said only "*un peu trop!*"

Yet there were compensations. They were fairly well-fed, though they could never afford milk save for the baby; half a pint every other day for him. They lived on coffee, bread and butter, bacon, and very occasionally a little pork.

The house belonged to them. It had cost £92, with 777 square



FARMHOUSE IN FLANDERS.

The farm is 50 acres, $37\frac{1}{2}$ of which belong to the cultivator. He has had sixteen children. Thirteen are living. Three sons and three daughters are at home and help on the farm. Three sons are married, one of whom is in America. One son is a carpenter. One daughter is in a convent and two are governesses.



INTERIOR OF ABOVE FARMHOUSE.

yards of land, and was built seven years ago. At that time they had nothing, but husband and wife worked very hard, and two years ago they managed to rent $2\frac{1}{2}$ acres for £6. Now they would like to get a little more, but there is no more land available. The children helped how they could, and collected manure from the roads. The money borrowed to build the house was nearly paid off, but this had only been done by excessively hard work, and not a little privation.¹

Let us now turn from the Belgian agricultural labourer to the peasant cultivator, or small holder.² Since, as we have seen (p. 110), two-thirds of the country is divided into holdings of not more than 50 acres in extent, the conditions under which he lives are of great importance. Is his life one of mere slavery, as is frequently averred, or is it, on the whole, such as one would wish to see imitated in other countries? This is a question to which the writer has given close attention in the course of his visits to the peasants in their homes, and although the answer must always be influenced by the observer's point of view, some of the facts emerging from careful observation cannot be seriously disputed. There is no doubt that, taken as a class, small holders must, and do, work hard if they wish to maintain themselves in a state of moderate comfort. Some, of course, are more ambitious than others, and are not content to remain tenants. They are always seeking to increase the area of the land which they own. They spend every spare penny on their farms, not on themselves, and this often means a hard struggle continued for long years. A great many others, although they are content to remain tenants of the land they cultivate, wish to purchase their houses and the land on which they stand, and this again means very hard work and not a little privation, until the purchase-money is paid off. But to speak in general terms of the life of the small holder as one of unending toil

¹ For another description, see p. 381.

² The term "small holder" is a very elastic one. In one district a man can live fairly comfortably on less than 10 acres, in another it is difficult to make a living on 60. Everything depends on the nature of the soil, and the kind of culture for which it is suited. In this chapter, when speaking of small holdings, the writer refers to the smallest class of holding upon which cultivators depend for their whole income.

and virtual slavery, in which wife and children are forced to share, is an exaggeration. The wives indeed help on the farm, as already stated, but it is exceptional for them to be employed upon heavy manual labour. It is true that the long hours of the men—longer in summer than those of the paid labourers—and the many duties of the women, who, in addition to the physical strain of child-bearing, have to undertake the care of the house and the lighter duties of the farm, make both look prematurely old. If, however, they have children who stay at home and help, their share of toil is lessened as that help becomes more effective. Moreover, in winter the hours are necessarily much shorter.

Although the work is hard, the small holder's standard of living is not a low one. Of course, there are squalid, miserable homes in this class as in all others, but on the whole he is fairly well housed and adequately, even if somewhat roughly, fed. Here are a few extracts taken from the writer's notebooks describing visits paid to small holders' families which may be regarded as typical. It will be seen that conditions vary greatly, but in all cases they include hard work and long hours.

SMALL HOLDER, SANDY REGION OF FLANDERS

This man rented 5 acres in five separate plots. He had begun cultivating on his own account at the time of his marriage, in 1871, and gradually had increased his holding up to 5 acres, for which he paid £9: 16s. rent—8s. more than five years ago. He had had twelve children, of whom nine were living. For four months in the year he worked as a labourer for other people, and earned 1s. 1d. a day, without food, in summer, and 11½d. in winter, his hours being from 5.30 A.M. to 8 P.M., with three hours off. His stock consisted of a cow, a goat, three rabbits, ten hens, and three pigs. He killed one pig a year for his own use, and ate butcher's meat on Sundays.

He explained that he did all his own work without the aid of machinery, but sometimes he hired a horse. But he could not live without the help of his children, who, in the course of the past year, had given him £24.

His cottage was small, but clean. The kitchen had a tiled floor and a large open fireplace, but was rather poorly furnished, though adorned with pictures and images of saints. There were two small



SMALL FARMHOUSE IN FLANDERS.

The dwelling-house to the right and farm buildings on left. The farm is 5 acres. For eighteen years the farmer worked in France every year, till he saved enough to buy $1\frac{1}{4}$ acres, which he gradually increased. He has five sons—four work in France as he did and one helps at home—and four daughters, two in service, two at home. Note absence of spouting on roof.



SMALL HOLDER'S HOUSE (POLDERS REGION).

Holding, $2\frac{1}{2}$ acres. The woman seen in gateway has had sixteen children; thirteen are living. One son is in army, three are industrial workers, one helps at home. Of the eight daughters, six are married, one is in service, and one at home.

bedrooms. This man was not especially intelligent, but evidently a hard worker.

SMALL HOLDER, CAMPINE

Visited a home typical of this district. It was that of a small holder, who paid £1 per acre for arable land and £2 for pasture, with £2:3s. in taxes. He farmed 15 acres, in ten separate plots, part of the land being his own, but not the house or stables. He had no written lease, but had lived there seven years. Having seven children, he could save nothing, so he said, but they just managed to live, by extremely hard work, and "all of them always at it."

They had, when interviewed, five cows, two calves, one mare, one foal, eight fowls—not half their usual number—and four pigs. The kitchen was floored with red tiles, and had an open fireplace, with a large pot suspended by a chain. There was a basket of turf in the corner. They pay 25s. or 30s. for the right to cut as much of this as will last them for a year. There was a good deal of furniture, a large easy chair, a low square table, a clock and a lamp, two sideboards, and a bed hidden behind curtains. The children could read and write, and were evidently kept busy; one small girl was looking after the baby. The mother's eyesight was failing. A pile of beer-glasses in the corner was explained by the inscription *In den Ton Herberg*. These people were poor and not very intelligent.

SMALL HOLDER, "IMPROVED CAMPINE"

A much superior holding was visited in the Improved Campine. It was a poultry farm, though at the time they had only 150 fowls, having sold the bulk off before the shooting season, when the price of fowls always declines. They were sold to a merchant, and chiefly taken to the environs of Brussels, to be fattened there. Eight or nine hundred annually were bred on the farm.

On this holding of 27 acres the rent was from £1:6s. to £2 an acre, and the tenant told us that there was still land to be had in the neighbourhood at £1, but it was poor in quality. The use of chemical manures, however, had transformed this region, which was scarcely cultivated seven years ago, into prosperous country. Formerly bread was taken to the church and distributed to the poor, but this custom had ceased with the need for it, and there were no paupers. Labourers often became cultivators, and when land was put up for sale, people bought it in small quantities, often paying part of the price in ready money, and borrowing the rest, at 5 per cent, from a notary. Potatoes and rye were cultivated on such holdings, and also beetroot, clover, and turnips, but there was no cattle-breeding and no machinery.

The tenant of the poultry farm was married forty years ago, and then had nothing, but had succeeded through sheer hard work. The

house was quite charming, with green window-frames, and covered with ivy. There was a large kitchen, with a red-tiled floor, a hanging lamp, a large table, and chairs along the wall, which was adorned with religious pictures. Flowers on the window-sills, curtains, and spotless china on a shelf, all added to the home-like appearance of the room; and the large cream-separator in the corner was scrupulously clean. We saw two grown-up girls, dressed rather stylishly, and their mother, a woman of unusual intelligence, wit, and good-humour, with a bearing full of dignity. By their courtesies we were enabled to note down the general items of the bill of fare.

Meals

- 5 A.M. Coffee, bread and butter.
 7.30 A.M. Coffee, bacon, bread, and potatoes.
Noon. Soup or milk "papp,"¹ ham, chicken, eggs or bacon, potatoes or other vegetables, and bread.
 4 P.M. Coffee and bread and butter; in busy seasons, ham also.
Evening. Generally buttermilk and potatoes.

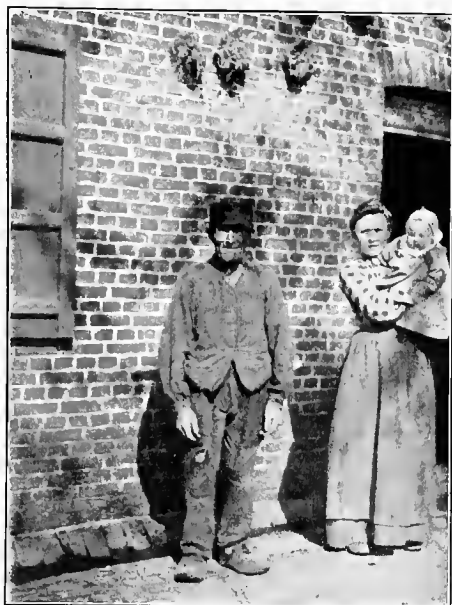
SMALL HOLDER, LOAMY REGION

Another home visited was that of a farmer in the loamy region, who had been a stonemason. Of his four sons the three eldest were masons, and the youngest worked as a labourer on a large farm. The three masons only meant to work at their trade till they had saved money and could return to the land and buy or rent some with their savings. They earned higher wages as masons than they could as agricultural labourers, but were not better off in the long-run, for living cost more in the towns, and there were more temptations to spend money.

The father owned his house and stables, and $4\frac{1}{2}$ acres of land, only renting 3000 square yards, at the rate of £2 per acre. He had two cows, one heifer, and a few pigs; he generally used the cows for ploughing, but for the hardest work he borrowed horses from a large farmer, paying him back in occasional labour. His crops were wheat, rye, oats, clover, potatoes, and beetroot. Last year the wheat yielded about 36 cwts. per acre, all of which he used himself. The work was very hard in summer—from 4 A.M. to dusk—but in winter he had an easier time.

He told us that one of his sons, who was working in France, sent him £30 a year, but that he could live without his help. A small farmer, he said, could save money. He was an active, intelligent man, and the house was in good condition, while iron gates at the entrance gave it a look of importance. The kitchen was large, with two easy chairs, and newspapers on the table. In the cellar there were plenty

¹ Made of rice and milk, with sugar added.



INN-KEEPER AND SMALL HOLDER, WORTEGEM.

He cultivates about $6\frac{1}{2}$ acres, paying £15 rent. The land is in several parcels, but the farthest is only five minutes away. There are two sons and a married daughter. He has been nineteen years on the farm. He has three cows, a pig, fowls, rabbits, and his own cart, and in summer works from 4 A.M. till 9 P.M., with about $3\frac{1}{2}$ hours' rest.



MOTHER AND TWO SONS, AGED 14 AND 13 (FLEMISH).

The younger, who is getting turnips, still goes to school. There are six younger children.
The farm is 20 acres. They have one mule.

of eggs, bread, cheese, butter, potatoes, and ham. There was also a bag of stonemason's tools, a relic of former days. The whole family seemed contented and cheerful.¹

The Flemish small holder undoubtedly lives harder and saves more than the Walloon. The latter seems to enjoy life more, and to have a greater margin of money for little luxuries, but his balance at the bank is probably less substantial, and he takes much less care for the future than the Fleming. On the other hand, he is more intelligent, and quicker to adopt new methods of culture and labour-saving appliances, while the Fleming makes up for lack of enterprise by unremitting toil. Taking the class of small holders as a whole, the writer considers their lot decidedly superior to that of the English agricultural labourer, with his hopeless outlook, and consequent lack of really intelligent interest in his work. It is hard, nevertheless, and what makes it so hard is the necessity for meeting a constantly increasing demand for rent. We have seen that the cost of agricultural land was twice as high in 1908 as in 1846, and that it stands at twice the figure of similar or superior land in England. Quite apart from the price or rent of buildings, the small holding almost always costs more, area for area, than the large farm. It will be remembered that more than two-thirds of these small cultivators are tenants, and only one-third owners of their holdings. Every improvement in agricultural method, every fresh discovery which goes to increase the yield from the land, every economy of labour, whether by means of machinery or of co-operation, has two results—the immediate raising of the small holder's profits and the ultimate raising of his rent. For when his prosperity is observed, others flock into the district, anxious to share in it, and their demand for land sends up both its cost and rent. Thus, his hard work and intelligence, under the present system, actually militate against him in the long-run. But for this fatal drawback, what with the steady growth in agricultural knowledge and

¹ For a further and more detailed description of small holders' standard of living see Chapter XXIII.

the increasing yield from the land, his lot would be one which any country might envy for her own people.

A description of the Belgian agriculturist would be incomplete without a brief reference to the life of the large farmer. Subject to minor national characteristics, it is very similar to that of large farmers in England, France, Germany, and other countries. He lives well, is well housed, and well clothed. In some parts of Belgium he will work alongside of his labourers; in others this would be an unheard-of thing. As a rule, especially in the Walloon provinces, he is fairly intelligent and willing to adopt improved methods of cultivation. His wife and daughters usually take part in the work of the dairy and direct some of the minor operations of the farm. His sons, if they do not follow him in his own occupation, may take up one of the liberal professions and become doctors or lawyers. Numerically, however, as we have seen, large farmers are of comparatively slight importance in the rural economy of the country; and year by year, as the demand for small holdings grows and the rents offered for them rise, and it becomes increasingly difficult to find an adequate supply of labour, their farms are broken up and let off in small holdings.

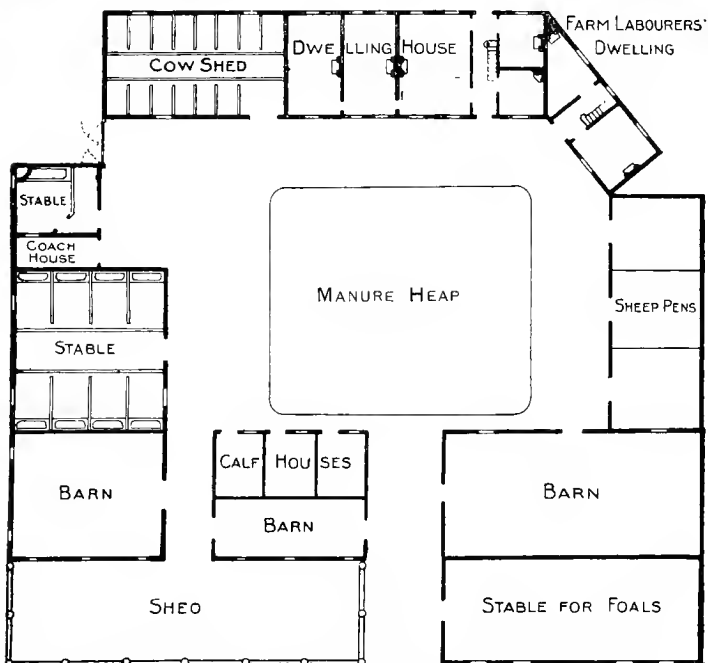
A few interesting comparisons between Belgium and Great Britain may be drawn before the close of this chapter.

The proportion of the total population over twelve years of age engaged in agriculture in Belgium is nearly three times as great as in Britain, viz. 14 per cent, as compared with $5\frac{1}{4}$ per cent,¹ and the proportion of agriculturists to

¹ The actual numbers are :—

	1900. Belgium.	1901. Great Britain.
(a) Agricultural population (over twelve)	697,372	1,400,602 *
(b) Total population (over twelve) . . .	4,956,991	26,708,676
(c) Percentage of (a) to (b)	14·07	5·24

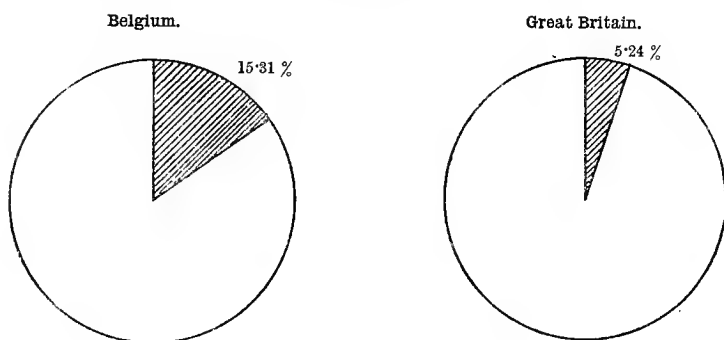
* This is the census figure for persons over ten years of age engaged in agriculture, but it may be assumed that no appreciable number of persons



PHOTOGRAPH AND PLAN OF A TYPICAL LARGE FARMSTEAD.
(Chapelle à Oye, Hainaut.)

all occupied persons is more than twice as high (23·1 per cent, as against 10·1 per cent).¹ Further, the actual number of agriculturists in Belgium is *increasing*; in Britain it is declining at a rate which alarms all who are concerned for the country's welfare, and which has given rise to numberless official enquiries. "The reduction in the number of persons returned as engaged in agriculture in Great Britain has been one of the most prominent features of Census returns for the past fifty years."²

PERCENTAGE OF POPULATION (OVER TWELVE YEARS OF AGE) ENGAGED
IN AGRICULTURE



It is true that the proportion which the agricultural population bears to the total population of the country is declining in Belgium, but only at half the rate of its decline in Britain.³

between ten and twelve years of age are employed in agriculture in Great Britain. The writer is aware that the British census figures are unsatisfactory, and only give a rough estimate of the number of persons actually engaged in agriculture. The methods by which they are arrived at are discussed in the Appendix (p. 580), as well as the reasons for adopting them as they stand, without attempting to correct them.

¹ 9.95 per cent in England and Wales, and 10.92 per cent in Scotland.

² *Report on the Decline in the Agricultural Population of Great Britain*, Cd. 3273, 1906, p. 1.

³ It has been assumed that the proportion of the population above twelve years of age has been the same in 1846 and 1895 as in 1900, and although this may not be absolutely accurate, the assumption may be permitted in a comparison which is necessarily a rough one.

PERCENTAGE OF THE TOTAL POPULATION OVER TWELVE ENGAGED
IN AGRICULTURE

Belgium. ^(a)			Great Britain. ^(b)		
	No. of Persons.	Per Cent.		No. of Persons.	Per Cent.
1846	1,083,601	34	1851	2,246,374	15·5
1895	1,204,810	26	1901	1,400,602	5·1

^(a) For the purposes of this comparison, the returns of Agricultural Population as given in the Agricultural Census have been adopted. The fact that they are probably too high, both for 1846 and 1895, does not seriously affect the deductions to be drawn from a *comparison* between them, although the absolute figures cannot be accepted as accurate.

^(b) Figures taken from the ordinary decennial population Census Returns.

It will be noted that whereas the agricultural population of Belgium *increased* in absolute numbers by 11 per cent between 1846 and 1895, in Great Britain it *decreased* by 38 per cent, although the total population of Great Britain increased in that period by 79 per cent. If we compare the agricultural population of the two countries in relation to the respective areas of cultivable land, we find that whereas Belgium has 95 agriculturists per square mile, Great Britain has only 28, or less than one-third the number.¹ If the proportion in Great Britain were the same as in Belgium, about 3½ million more persons would be engaged in agriculture.

As regards women's labour, we find that whereas in Belgium 23½ per cent of the agricultural population are women, in Britain the percentage is only 7 per cent.²

Another striking contrast between Belgium and Britain is the proportion of agricultural labourers in the two countries. In Belgium labourers only represent one-third of the total agricultural population, and the remaining two-thirds have a definite interest in the financial result of each year's labour,

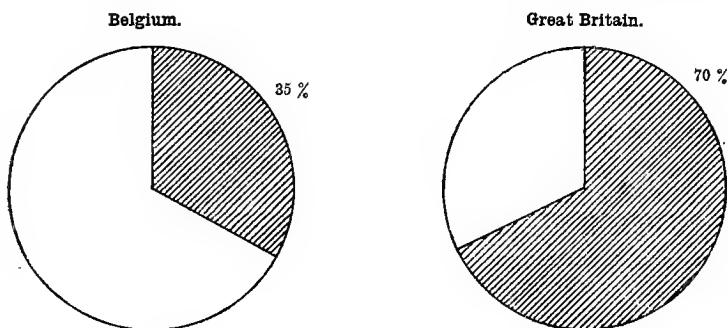
¹ The same proportion in England and Wales and in Scotland.

² 5 per cent in England and Wales, and 19 per cent in Scotland.

either as farmers (whether owners or tenants) or as members of farmers' families; and even of those returned as labourers many are already cultivating a plot of land on their own account, and will in time become independent small farmers.

In Britain the position is reversed, and over two-thirds (69·4 per cent) of the agricultural community are mere labourers, having no interest in their work beyond the weekly wage, and no prospect for the future but the work-house, unless they can manage to live on their Old Age Pensions.

PERCENTAGE OF LABOURERS TO TOTAL NUMBER OF AGRICULTURISTS



The reason for the great difference between the Belgian and the British figures is soon discovered—it lies in the fact that while one country has permitted and encouraged the subdivision of the soil, the other has not. This alone is sufficient to account for the proportionally greater agricultural population in Belgium. In this connection it may be noted that the area of Belgium where the agricultural population is the densest, coincides almost exactly with that in which the subdivision of land has been carried to the farthest point. It is sometimes maintained that in England the attraction of the relatively high wages to be obtained in the towns is so strong that the small-holding system cannot develop to any great extent.

Against this theory must be set the fact that the demand for small holdings in England is much greater than the supply of them which has hitherto been available. We must remember that the relative desirability of the life of a small holder and an industrial workman cannot be measured solely from the standpoint of wages. It is partly a matter of temperament. Just as one man would naturally choose the rush and excitement of town life, another would naturally choose the quiet and comparative freedom of the country, and to a certain extent these innate preferences counter-balance the desire for higher wages or an easier life. In short, not only in Belgium, where the "land-hunger" is strong and has had comparatively free play, but in many other countries where it has had nothing of the kind, there is a class of born small holders who, whenever they get the chance, will gravitate to the land. There is reason to suppose it is so in England, though the fact has been obscured by the many difficulties attaching to the subdivision of land. But small holdings really appeal not only to the Englishman's love of the country, but to his independence, and his desire to improve his position. His outlook is more hopeful, he has more scope for his own initiative, and he less readily becomes the victim of circumstances upon his plot of land than in the midst of a cast-iron industrial system.

Not only does the subdivision of land in Belgium account for the great agricultural population, but it accounts for the high proportion of workers who are either farmers or members of their families. Nearly nine-tenths of the holdings in Belgium are of less than 25 acres,¹ and these little farms are managed by the farmer, assisted by his family, without the need for hired labour.

However unsatisfactory some of the economic conditions of Belgium may be, she has succeeded in retaining a large part of her population upon the soil, and in giving to the great majority of her agricultural workers a direct interest

¹ 85.8 per cent, excluding holdings of less than $1\frac{1}{4}$ acres (*Recensement agricole*, 1906, p. 50).

in the success or failure of the work upon which they are engaged.

The figures hitherto given have shown that while the proportion of agriculturists above twelve years of age to the total population of Belgium has decreased, their actual numbers have increased. But to complete our survey we must estimate the ratio which the whole rural population, not merely the section of it represented by agriculturists proper, bears to the population of the towns. Belgian census figures do not distinguish between the rural and urban population, but the country is not too large to know thoroughly, and persons intimately acquainted with it have separated, for the purposes of this study,¹ the communes which are predominantly rural in character from those predominantly urban. Such analysis shows that in 1900 (the date of the last census) $56\frac{1}{2}$ per cent of the population lived in rural, and $43\frac{1}{2}$ per cent in urban communes. The actual number of country dwellers was greater in 1900 than in 1846, but their proportion to the total population of the country is less than it was, as town populations have increased at a greater rate.

A comparison of the ratio between the urban and rural population in Belgium with that existing between them in England and Wales, shows that Belgium has been much more successful than England in preventing the rush to the towns. Adopting the official classification² into urban

¹ The work of analysing the communes of Belgium, according to whether they were urban or rural, was undertaken by the writer's secretary, who had spent three years in Belgium, constantly travelling all over the country, in connection with the investigations dealt with in this volume. He was assisted by two or three Belgians whom he selected as having an especially good knowledge of the country.

In Belgium there are extensive districts which, though they may contain one or two factories, or be largely occupied by industrial workmen living away from their work, are rich in green fields and large gardens, and essentially rural in character. Such districts have been classed as rural.

² In England and Wales "urban" districts are those which have an Urban Sanitary Authority. Urban powers are conferred by a County Council (under the Local Government Act of 1888) on any rural district, or part of it, which applies for them and is clearly urban in character, or self-contained, and of sufficient rateable value to support a separate establishment.

and rural districts, we find that in 1901, 77 per cent of the population resided in the former and only 23 per cent in the latter.¹ Thus, the proportion of the total population which is living in rural districts is $2\frac{1}{2}$ times as great in Belgium as in England and Wales, where, in the twenty years prior to the last census, it declined by 9 per cent, while in Belgium it increased by 12 per cent. In both countries there was a marked increase in the urban population, amounting in England and Wales to 42 per cent and in Belgium to 36 per cent.²

The contrast between Belgian and English figures is very striking, and shows that Belgium has gone far in solving the problem of how to prevent the rush to the towns—a problem which, in Britain, has hitherto baffled all efforts at solution. The methods adopted to achieve these remarkable results are described in detail in the chapters of this book; most important among them are the development of agriculture and the provision of ample means of very cheap and rapid transit on the railways. Both of these depend largely for their success upon the system of land tenure.

¹ The writer recognises that it is impossible to classify the population into urban and rural dwellers with scientific accuracy, and that the basis of classification which he adopted in Belgium is not exactly identical with the English one, but the differences are not of sufficient importance vitally to affect the figures. In both countries some of the districts classed as "urban" comprise agricultural areas, and, on the other hand, some of those classed as "rural" comprise areas whose character is industrial. But for practical purposes the classifications adopted in the two countries may be accepted as comparable.

² The movement of the population in England and Wales cannot (except for towns having over 50,000 population) be compared further back than 1881, as important changes in the method of tabulating the figures were made in 1875, which render comparisons with previous years untrustworthy.

CHAPTER XVII

AGRICULTURAL EDUCATION AND SOME OF ITS RESULTS

AGRICULTURAL education falls naturally into two divisions—the higher education given in colleges and other institutions where students pass a number of years, and the popular education given locally to those actually engaged in farming. Both are provided in Belgium on an extensive scale, but the demand for the former is comparatively limited. The small holder whose son is destined to work on the farm cannot afford to give him a lengthy education, and practically the colleges are reserved for students who look forward to earning their living by a knowledge of the theoretical rather than the practical side of farming, either as professors or in connection with the agricultural department of the State. For such as these there is the State College at Gembloux,¹ with its course lasting three or four years, or the University at Louvain, or, if they desire to specialise in veterinary science, the Veterinary College at Brussels is open to them. Thorough but rather more elementary courses of instruction are provided at other centres, and in addition the State subsidises a number of private schools, on condition that they will give a certain amount of instruction in farming.² For farmers' daughters

¹ The fees are only £28 a year for board, residence, and instruction. Ninety Belgians and sixty-six foreigners attended the college in 1904. About 130 students attended the course at Louvain, and 140 the veterinary course at Brussels.

² Five private agricultural schools were subsidised in 1905 (total attendance, 180). In addition, fifteen secondary schools, with 620 students, received subsidies on condition that not less than five hours' instruction in

there are eleven schools where agriculture and domestic economy are taught to about two hundred girls, the course of instruction lasting one or two years.

We now pass to popular agricultural education. All primary schools in country districts give instruction in agriculture, a practice which many would like to see adopted in Britain. In certain cases this is followed up by continuation classes, held in the evening, and attended by children who have recently left primary schools, and are probably already engaged in country pursuits during the day. In 1905 there were twenty-eight of these continuation schools, attended in the aggregate by about nine hundred children. Mention must also be made of the travelling schools, where agriculture, dairying, and domestic economy are taught. These usually stay for three months in each centre, and about two thousand students obtained certificates of proficiency in them between 1890 and 1893, a yearly average of 154.

However valuable this instruction may be to young people, by far the most important part of the agricultural teaching given in Belgium is directly organised by the State experts (*agronomes de l'État*), of whom there are twenty-seven, with eight assistants. Three or four are attached to the office of the Minister of Agriculture in Brussels, the rest are distributed over the country, each having a district allotted to him, in which he does all he can to promote farming interests, while supplying the Minister of Agriculture with any local information which he may require.

With these ends in view the *agronomes* have organised a large number of popular lectures, on general farming, the feeding and management of cattle, farriery, fruit-growing, market-gardening, floriculture, etc. Special courses are given to soldiers in the barracks, and others to farmers' wives, the latter courses dealing with domestic economy,

agriculture was given weekly. Seventy-eight courses of lectures on the subject were given in secondary schools. One hour's teaching was given weekly to 2568 students.

the preserving of fruits, poultry-keeping, and similar subjects. In 1905, 8281 lectures of different types were delivered.¹ They are, as a rule, well supported, especially in the province of Luxembourg. In one village in that neighbourhood the writer was told that 80 per cent of the agricultural population attended, and that farmers often drove a long distance on winter nights to be present. The free distribution of a synopsis of the lectures throughout the locality contributes largely to their success. In many cases the *agronomes* themselves give the instruction; in others it is given by their assistants, or by special lecturers whom they appoint. Indeed, it seems to be an essential of success that lectures shall be at least organised by men whom the farmers know, and whom they meet week by week.

Perhaps even more important than these from the educational standpoint is the private help which the *agronomes* give to farmers. The State takes great pains to make it known that any cultivator, great or small, who wants advice may receive it free of charge from the nearest *agronome de l'État*, and written advice was given to individual farmers in 2597 cases during 1905.² But much more is given verbally, either at the farms themselves

	Number of Courses.	Number of Lectures.	Average Attendance.
¹ Agriculture	330	2387	49
Fruit culture	194	1608	51
Market-gardening	132	938	55
Flower culture	31	310 (a)	56
Bee-keeping	?	365	?
Poultry	?	329	?
Farriery	22	220 (a)	32
Lectures to farmers' wives	?	210	61
„ soldiers	87	1914	25

These figures are taken from "Situation de l'enseignement vétérinaire et agricole," *Rapport triennal, 1903-1905*.

(a) It has been assumed that there were ten lectures per course.

² Some typical questions which have been addressed to *agronomes* are given in the Appendix, page 582. They have been supplied to the writer by the kindness of the Minister of Agriculture.

or at the markets, which the *agronomes* attend at stated times in order to meet the farmers and give them any help they can. It is instructive to accompany one of these officials to market and see how constantly he is hailed and consulted on all kinds of questions. Much service is also rendered by the experimental plots, of which there are about a hundred in Belgium under the charge of the *agronomes*. The use to which they are put varies. First they are made to illustrate the advantages of new and improved seeds recommended by the Government experts, or of new methods of cultivation; and many a farmer who would refuse to adopt these on hearsay, accepts them after actually seeing the success attending them. But, in addition, the plots afford accurate and detailed information for an agricultural atlas of Belgium which the Government is preparing, and in which particulars will be given of the composition of the soil throughout the country, the crops for which it is especially suitable, and the kinds of manure required. Altogether, the £2000 which the State devotes annually to experimental plots is well-spent money.

There is no doubt that the work of the *agronomes* is increasing the knowledge of agriculture and improving its methods throughout Belgium, for although a few of the older practical farmers still look askance at "college-bred men with their new-fangled theories," the younger generation is increasingly willing to listen to them, and through their agency the latest information with regard to scientific farming is being brought home to many small holders.

To say that Belgium has solved the problem of how best to further agricultural education, or that the remarkable crop results described in a preceding chapter are due principally to a high development of scientific knowledge among her peasants, would certainly be to exaggerate. The Belgian, especially the Fleming, is naturally an agriculturist. His ancestors have lived on the land for many generations, and his success must often be attributed to

hard work and practical common sense rather than to correct theories. Nevertheless, popular agricultural instruction bears good fruit, and the methods employed in its dissemination are worthy of careful study by other countries.

A comparison between Belgium and Britain shows that, so far as the higher agricultural education is concerned, both countries are fairly well equipped; but there is no doubt that the former has succeeded much better in providing the right kind of popular instruction. One of the conclusions arrived at by the Departmental Committee on Agricultural Education in England and Wales was that "the facilities for agricultural instruction of a lower grade are unorganised, unsystematic, and wholly inadequate."¹ No doubt a number of popular lectures are given in the country districts, but not on anything like the Belgian scale, and the personal relationships between lecturer and audience are less close. In Britain he comes down from a distant college, gives his discourse, and goes away again; but in Belgium, as we have seen, the teaching is given, or at any rate organised, by the *agronome*, who has a wide acquaintance among the local men, meeting them frequently, and coming to visit them on their farms. Farmers are notoriously suspicious and conservative, and the personal element probably plays a greater part in the success or failure of lectures in country districts than in towns.

Among the direct results of the careful teaching which has just been described, is a wide recognition of the importance of an adequate supply of manure, and an understanding of the kind required by any particular soil. As a consequence, the Belgians now use more artificial manure per acre than any other country in the world. According to official statistics, which refer only to holdings of 2½ acres and over, they used in the year 1906, 450,000 tons, equal to 2 cwts. to the acre, the principal kinds being nitrate of soda, superphosphates of lime, basic slag, and

¹ Cd. 4206, 1908, p. 36.

kainite.¹ There are no official statistics to show the quantities employed in the United Kingdom, but an estimate has been submitted to the writer, by a statistician having special knowledge of agriculture, in which the total of all kinds is placed at 1,500,000 tons.² This figure is based on evidence given before the Fertilising and Feeding Stuffs Committee, and an examination of imports and exports, and may be compared with the official Belgian figures. Assuming that the quality of each kind of manure is the same in the two countries (and there is no reason to suppose that it is widely different), and that all are of average strength, then it would appear that in proportion to her cultivated area Belgium employs thirty-five times as much potash (K_2O), two and a quarter times as much phosphates (P_2O_5), and over three times as much nitrogen as the United Kingdom. Although these figures are nothing more than a very rough estimate, they go far to explain the greater yield per acre in the one country, and to prove how much the other loses from her failure to make abundant use of the appropriate chemical manures.³ In

¹ Nitrate of soda	79·015 tons, equal to 41 lbs. per acre of cultivated land.		
Superphosphates	117·192	„	61 „ „
Basic slag	95·420	„	47 „ „
Kainite	29·161		10

Of course in certain districts the amounts used per acre are very much higher than the average figures given above. Thus in the arrondissement of Roulers the average consumption of nitrate of soda amounted to 205 lbs. per acre, in Thielt to 196, and in Ostend to 103. In Tournai the average consumption of superphosphates was 160 lbs. per acre, in Bruges 127 lbs. Coming to kainite, we find that whereas the average consumption for the whole of the country was 10 lbs. per acre, in Maesyck it was 45, in Waremmé 36, and in Liège 28 lbs. per acre.

² In a letter to the writer, dated October 1907, the Secretary of the Fertiliser Manufacturers' Association says that according to the most trustworthy estimates, the quantity of chemical manure used in Great Britain (without Ireland) is "probably about one million tons per annum." This is a somewhat lower figure than was given by a witness to the Fertilising and Feeding Stuffs Committee, viz. 1,295,000 tons (Cd. 2386, 1905, Appendix xxii.), and both are lower than the one used above, even after making all reasonable allowances for chemical manures used in Ireland.

³ In the figures given above it has unfortunately been impossible to take into account the manurial value of feeding-stuffs, as the figures even for a very rough estimate are lacking. Nor has account been taken of farm-yard manure, lime, or marl.

certain regions, noticeably in the Ardennes, they have absolutely revolutionised agriculture, and changed soil that was almost worthless into valuable land. A few extracts from the writer's notebook of conversations held with farmers and others in the Ardennes in September 1907 will illustrate this fact.

"Land," said one farmer, "which was worth £6 to £8 twenty-five years ago is now worth £60 to £80, owing to the use of chemical manure and to better means of communication." This referred to land which was not worth cultivating without such treatment. In the commune of Offagne the writer was told that "better means of communication and chemical manures have raised the price of land by 33 per cent in the last twenty years." In Libramont we hear the same thing: "Rent has more than doubled in ten years, owing to the discovery of chemical manure and the better means of communication." A farmer in the commune of Florimont St. Pierre said: "The great transformation in this district is due to chemical manure, and if it were not for the high altitude (1600 feet) we could produce almost anything. The price of land generally has doubled in twenty years, but some, which ten years since was only worth £4, will fetch £52 to-day. I myself bought land about thirty years ago at less than 32s. per acre which I am *letting* for that sum per annum."

In the Campine equally extraordinary changes are being effected, and waste moorland is being transformed into valuable farms.

But this remarkable increase in productivity is not confined to land which has hitherto been almost valueless. Throughout Belgium these manures are being used on a lavish scale with striking effects. A large farmer in Ciney, in the Condroz district, told the writer that "before the application of chemical manures, the life of the agriculturist was very hard; now it has greatly improved. In the old days we used to drink water—now we drink burgundy, as in Hesbaye, or even champagne."

There are many other ways in which the Belgian

agriculturist employs modern science to help him in raising the large crops referred to in a previous chapter.¹ Passing through the "fertile plain of Flanders," the traveller is struck by the care with which the land is irrigated, and admires the skill by which each plot, however small, is used to the best advantage, according to its situation and character. It is true that agricultural machinery has not, to a very large extent, found its way into Belgium, but this is due to the small size of the average farm rather than to disinclination on the part of the farmer to avail himself of labour-saving appliances. Moreover, it must not be forgotten that the cost of labour is exceedingly low, and so there is not the same pressing need for the introduction of machinery as in thinly populated countries where wages are high.

The perusal of this and the preceding chapters will have helped the reader to understand that Belgium's agricultural prosperity is due to economic and social, rather than to natural advantages. Among these, not least important is her system of agricultural education, leading to the free and intelligent use of chemical manures and to many improved methods.

¹ Chapter on Crops and Live Stock.

CHAPTER XVIII

AGRICULTURAL SOCIETIES

WE have seen that the Belgian agriculturist, whether he be a large farmer or a peasant cultivating his small plot of land, has a thorough and systematic course of technical instruction placed within his reach. But in addition to this there is a far-reaching organisation of agricultural societies, which has played so large a part in the development of Belgian agriculture that it merits our careful attention.

Practically every village has its society, and many have more than one. There are societies to develop agriculture generally, societies to develop market-gardening, societies to improve the breed of horses, of cattle, of goats, and of rabbits; societies to insure cattle and horses against death, and houses and stock against fire; societies to provide those who work on the land with pensions and to lend them money; to buy their goods and to sell their produce—in short, there are societies to supply their every conceivable need. They have penetrated into the most remote country districts, and have been of great service to the agricultural population.

Broadly speaking, they fall into two classes. First come the societies instituted by Government, and drawing the whole or the greater part of their revenue from public funds; and secondly, those founded by private enterprise, known as *associations libres*.

The State organisations were first in the field. By a royal decree, dated 1848, a number of local societies called *comices* were formed, whose duties were to watch over the interests of agriculture in the localities allotted to them,

and among other things to arrange for exhibitions of agricultural produce. In 1907 there were 158 *comices*, with 34,000 members, as compared with 149, with 23,173 members, in 1895.

The *comices* of every province unite to form a provincial council, to which each *comice* sends two delegates. This council receives Government subsidies for local distribution, regulates the holding of exhibitions, organises experimental plots, in conjunction with the State agricultural experts, and advises on all subjects submitted to it by Government or by the *comices*. It encourages improved methods and the development of rural industries by every means in its power, it assists the Government to protect and stimulate different branches of agriculture, and it publishes a journal, thus keeping the members in touch with each other and diffusing knowledge of progressive agricultural methods.

These federations of the *comices* are, in their turn, federated in the Superior Council of Agriculture, which consists of two delegates from each provincial council, and eighteen members appointed by Government, half of whom are representatives of the free associations.¹ The subscription demanded from the members of the *comices* is sufficiently large to preclude many of the smaller agriculturists from joining, but the bulk of their income is derived from a Government subsidy of about £8000 a year, to which small provincial subsidies are added.

The place of these official associations is now being largely taken by the free associations, and they tend more and more to limit their activities to the organisation of agricultural shows. This is due to various causes, among others their own somewhat inelastic constitution, and the fact that people with no agricultural knowledge have been admitted into them. Thus they have gradually lost the confidence of certain classes of agriculturists, who prefer to devote their energies to the free associations, which are not

¹ The presence of these representatives is severely criticised by many Liberals and Socialists, who maintain that as the free associations are in fact almost exclusively Catholic, they should not be represented on an official and non-political body.

subject to Government control and can develop exactly on their own lines. On the whole these free associations seem better suited to the small cultivators who are so numerous in Belgium. Formerly the Government relied on the official societies to supply information regarding the condition and the needs of agriculture in the different parts of the country, but this is now done by the State agricultural experts. At the same time, the official organisations have played an important part in the development of Belgian agriculture, and some of them are still doing excellent work. During 1907 they organised eight regional, and seventy-eight local agricultural shows, and united with the Government agricultural experts in supervising twenty-two experimental plots in various parts of the country; they also exerted their influence in persuading agriculturists to make use of the educational facilities afforded by the Government.

There is one *comice*, namely that of Herzele, in East Flanders, whose work is so interesting and suggestive that it is worth outlining here. It has, in the first place, by an ingenious arrangement of its subscriptions, enabled the smallest farmers, and even labourers, to become members; and instead of being antagonistic to free agricultural societies, it seeks to promote their growth. Following up this policy of encouraging the poorer cultivators, who, in this district, are backward in education and extremely conservative, the *comice* affiliates to itself all the small peasant societies, and is more or less in touch with at least thirty of these.¹ It is not often that State associations are on an

1	8 Societies for insurance of cattle	.		with 752 members.
1	Co-operative Society for purchase	.	..	392 ..
1	.. .. selection of seed	.	..	20 ..
4	.. dairies	.	..	280 ..
4	Stock-breeding societies	.	..	132 ..
1	Raiffeisen Bank	.	..	21 ..
1	Electric Light Company	.	..	66 ..
1	Co-operative Distillery	.	..	43 ..
1	Society for Agricultural Experiment	.	..	10 ..
1	Society for purchase of agricultural implements	.	..	11 ..
1	Benevolent Society.			
6	Other Branch Societies.			

amicable footing with the Catholic League of Peasant Societies working in the same district, but this has been accomplished by the *Herzele comice*. Its internal management is not less excellent than its external relationships. It has formed a library and a museum, devoted to agricultural information, and it organises lectures and classes on technical farming subjects. But it is in the domain of research that it has achieved the most striking results. Its investigations have been confided to its peasant and farmer members, to be carried out, not in a technical laboratory, but in the open fields; and they have led to the use of better manure, the choice of better varieties of plants, and the general adoption of methods more suitable to the soil. Altogether, it is estimated that the farmers in the commune have been gainers to the amount of £2 per acre per annum.¹ In like manner, improvement in the stock-rearing industry has been brought about. Experiments were made in feeding stock throughout a period of four years, by which *Herzele* farmers were shown how they could effect an annual saving in fodder of over £3 per cow and yet increase the annual yield of milk in their herds to the extent of another £2 per head, whilst the stock itself was made worth £1 a head more.

This *comice*, by means of a co-operative society for the purchase of manure, has effected a saving for its members of 1s. 3d. per cwt., an important item in view of the much more extensive use of manure demanded by improved cultural methods. It has also secured 40 per cent reduction for its members on premiums for life, fire, and accident insurance. On a farm of 25 acres the sum total of all these benefits would amount to nearly £100 per annum.²

¹ *Le Comice agricole de Herzele*, a report prepared for the Paris Exhibition (Vanderpoorken, Ghent, 1900).

² 24 acres at 52s. 5d. per acre	£64	16	0
6 cows bring extra	30	0	0
Saved on manure and fodder	1	16	0
Saved on insurance	0	12	0
	<hr/>		
	£97	4	0

or £3 : 18 : 8 per acre.

Even if these figures represent a maximum result, they show what a well-organised *comice* can do. But still more astonishing and gratifying is the effect produced on the Flemish peasants of Herzele. Once noted for their scorn of education and technical knowledge as aids to the practical agriculturist, they are now quite reconciled to modern methods, and anxious to make use of them. But it must be remembered that this *comice* is an exception.

The rise of the free associations dates from 1886, nearly forty years after the institution of the official ones. But though they came so much later upon the field, their growth has been much more rapid, and at the present time there are over five thousand of them in Belgium, an average of about two for every commune. It must be remembered, however, in contrasting the different rates of increase of the two kinds of associations, that the progress of the unofficial bodies would scarcely have been possible but for the half-century of educational work done by their predecessors.

The great majority of them are gathered into seven large federations, three of which are Flemish, and four Walloon. Before we can thoroughly understand their nature, we must turn aside for a moment and consider the forces which are at work to create so powerful an organisation.

An English reader, unfamiliar with Belgian conditions, finds it almost impossible to realise how intimately political and religious differences enter into the life and thought of the country. As already pointed out, almost all social activities are denominational and political in character. If the Socialists, for instance, start a co-operative bakery in a town, the Catholics will probably start one in opposition to it. If the Catholics start a trade union, the Socialists will be pretty sure to follow suit. Combination in social work between Catholics and those belonging either to the Liberal or Socialist parties is very rare. The great development of agricultural societies is almost entirely the

work of the Catholic or Conservative party; and it is doubtful whether it would have been half so important but for the whole-hearted devotion of hundreds of priests, who have made themselves responsible for managing and superintending the little village societies. The writer visited one of these priests, who showed him the elaborate system of book-keeping which he himself undertook in connection with all kinds of agricultural societies in the village. If a cow was to be insured, the priest must value it. If fresh ideas and fresh initiative were required, he must supply them. There can be little doubt that one powerful motive for such self-sacrificing work is the desire of the priests to bind the peasants more closely to the Catholic Church, and unless we recognise their wonderful enthusiasm, we shall fail to understand the extraordinarily rapid development of these societies in Belgium.¹

Let us now turn to a consideration of the practical work undertaken by them. This can best be done by studying the greatest of the seven federations referred to above, namely the *Boerenbond* (League of Peasants), which has its headquarters in Louvain. It was founded in 1890,

¹ In this connection may be cited the remarks made by M. Léon 't Serstevens, the President of the Superior Council of Agriculture, when speaking at a Congress of Catholic institutions, held at Nivelles in 1899: "To-day," he said, "what a magnificent wealth of enterprises, as varied as they are numerous! These are our social activities, whose benefits the rural districts are only just beginning to appreciate; and our economic activities, which should win us fresh allies, and give us strength not only to make proselytes in the good cause, but to fight the vast proselytism for evil, to which those who vaunt their scorn for God, for the family, and for the country, are devoting themselves with increasing ardour. Our adversaries, the enemies of religion and of order, of the family and of social life, redouble their efforts and their associations; their work is enormous. The moment is come to decide which shall prevail—good or evil—progress, peace, justice, and religious authority, or an appalling ebullition of all the worst passions that the spirit of evil can arouse! . . . We have seen the great extent and power of Catholic enterprises. They have retained whole provinces for us; they have just conquered another; and we hope that ere long they will conquer more. Let us imitate these noble examples, and multiply unions, schools, friendly societies, and co-operative associations." —Quoted in *Les Associations rurales en Belgique* (*Musée Social*, Paris, p. 169). Many other extracts to the same effect from the speeches and writings of those who are responsible for the great development of the free agricultural associations could be given.

and is frankly Catholic in character. Its aims are stated to be :—

- (1) The defence of the religious, moral, and material interests of the peasants.
- (2) The improvement of agricultural legislation.
- (3) The co-operative organisation of agriculture.

It operates in the provinces of Antwerp, Brabant, and Limbourg, where the peasants are still very faithful to the Church.

506 local associations, with a total membership of 41,701, were affiliated to the *Boerenbond* in 1908. These concern themselves with the co-operative purchase of manures and feeding-stuffs, the organisation of agricultural credit, mutual insurance against all kinds of ills, the development of co-operative dairies, and a variety of other matters.

Some idea of the magnitude of the operations of the *Boerenbond* may be gained from the fact that during the year 1908 it bought, on behalf of its affiliated societies, over 27,500 tons of chemical manures, and over 33,400 tons of food-stuffs for cattle, costing together about £320,000. It also bought about 95 tons of seeds and £5000 worth of machinery. It superintended seventy co-operative dairies, and audited their accounts. It managed two mills at Antwerp and Hasselt, where flour and food-stuffs were ground, and where a considerable merchant business was conducted; in connection with the former 24,500 tons of feeding-stuffs were bought in 1908. It conducted a banking business with 286 affiliated *Raiffeisen* banks,¹ with a turnover of more than £640,000 in 1908.²

Besides superintending the local mutual insurance societies, it arranges for the re-insurance of the greater part of their risks, thus rendering them secure. In the provinces of Brabant and Limbourg alone, the number of

¹ See p. 249.

² These figures are taken from the official report of the *Boerenbond* for 1908.

cattle re-insured through the agency of the *Boerenbond* is about 70,000, insured for nearly one million pounds, the horses re-insured numbering nearly 6000, for £260,000.

It would be tedious to give in detail an account of all the many-sided activities of the *Boerenbond*, but reference should be made to its weekly newspaper, to the active steps it takes to improve the breeds of various kinds of live stock, to its arrangements for giving advice to its members upon legal questions, and especially to its efforts to influence legislation in matters affecting agriculture. Shortly after it was formed in 1890 it succeeded in preventing the Government from passing a Bill for the compulsory insurance of live stock, and in 1895 it organised demonstrations throughout the country, and induced the Government to place a protective duty upon oats and butter, and to increase its compensation in cases where animals were slaughtered owing to contagious diseases. In a number of other matters this League has successfully striven to obtain legislation which it considered favourable to agriculturists. At present the chief legislative reforms demanded by it are :—

1. A reorganisation of the system of taxation, including a reduction of the land tax, and a tax on shares.
2. A modification of the laws of succession, and of those affecting the leasing of land.
3. Laws against usury and stock exchange speculation.
4. Protective duties on agricultural products.

When the great power of the *Boerenbond* is remembered, there can be no doubt that it is likely to play an important part in influencing future legislation. Finally, it aims ceaselessly at organising co-operative agriculture by the creation of local guilds. The success which has attended this work can be partially gauged by contrasting the 300 local societies, with 19,000 cultivators, of 1897 with the 506 societies and 41,701 cultivators of 1908.

The *Boerenbond* may be taken as typical of the other six federations of agricultural societies, though

these are all much smaller, and each is confined to one province.¹

In addition to the societies described, which concern themselves with the general interests of agriculture, there are a great many more, devoting their attention to special branches—for instance, three large national societies for improving the breed of horses, and 382 for improving the breed of cattle. Goat breeding claims 344 societies, rabbit breeding 24, and pig breeding 9. The work of some of these will be referred to later. Then there are no less than 252 societies of bee-keepers, 184 of horticulturists, 85 of poultry-keepers, 39 of hop-growers, and 77 of beetroot cultivators. It is not pretended that this list is complete, but it comprises most of the existing agricultural societies, and serves to show how widespread is the spirit of combination and co-operation throughout the country—an important factor in the success of Belgian agriculture. These societies primarily devote their attention to the organisation of exhibitions, and of lectures and conferences. They are grouped into federations which seek to obtain from the central and provincial Governments subsidies to be distributed among the local societies, to pay for the prizes given at the exhibitions. The society of beetroot growers was created to counteract the fraudulent methods adopted by certain sugar refiners in their dealings with growers, who,

¹ The following table shows the distribution of the federated Societies over the different provinces at the end of 1907.

Province.	Number of Guilds.	Number of Members.
Antwerp	99	10,280
Brabant	138	12,460
West Flanders	157	10,021
East Flanders	57	2,850
Hainaut	65	3,800
Liège	61	2,164
Limbourg	145	11,784
Luxembourg	268	7,096
Namur	113	3,226
Total	1103	63,681

through its instrumentality, are now able to obtain better terms from the refiners.

The present high quality of Belgian horses is well known, but before 1840 they were not highly valued. About that time the Government began to devote its attention to the improvement of the breed, with such good effect that now purchasers come from all parts of the world to buy cart-horses in Belgium. Every year, in October and November, all stallions which are intended for public use in the following year are examined by a commission of experts, appointed by the Government, and none may be used which have not been passed by the commission. To encourage the breeding of stallions of good quality the central and provincial Governments offer large prizes. The cost of this work, including the prizes, amounts to £14,000 a year. In addition, £1200 is granted by the Government to the National Cart-Horse Society, which keeps a stud-book and takes other measures for the improvement of the race. As a result of this systematic effort the value of cart-horses has increased enormously. Recently £1120 and £1600 respectively were offered for two stallions, and refused by the proprietors. It is very seldom that a foreigner can buy a stallion which has passed the examination of the commission for less than £300, and even foals of three or four months old sell for £60 to £80.

While there are only three societies for improving the breed of horses, there are no less than 382 for improving the breed of cattle. The great importance of cattle-breeding became evident after the agricultural crisis, when the farmers began to devote themselves more and more to this and to the dairy industry, and less to the growth of cereals. In 1890 a national society was formed which at once set to work to improve the cattle—at that time by no means good in quality. The provincial Governments made regulations under which no bulls might be used for the public service of cows unless they had been approved by a committee of experts; but most of the work in improving the breeds of cattle has been done by the

hundreds of small local societies, the first of which was formed in 1897.¹

The success of these societies is largely due to their federation into a few large groups. Thus, instead of each little society working towards its own ideal, there is unity of policy. At first an effort was made to improve the race of Belgian cattle by crossing them with English breeds; but as this failed, recourse was had to very careful selection of the Belgian stock, which is the policy now universally employed. The local societies make careful examination of all the bulls in their districts, and if there are none which they consider satisfactory, they buy one for public use. A careful register is kept of cattle with desirable qualities, and prizes are given annually to all owners of those which secure 70 per cent of the possible points in the annual examinations. The cost of the prizes is defrayed partly by the State, which pays £800 to the national society and £4000 to the local societies for this purpose, and partly by the provincial Governments, which devote £16,000 a year to improving the breeds of cattle. It must also be remembered that the State heavily subsidises exhibitions organised by the *comices* and other official agricultural societies, and that most of the prizes in these are for cattle.

It is alleged that the juries who judge the cattle pay too much attention to conformation and too little to the milk-giving qualities; and with a view to developing the

¹ The progress of these societies may be seen from the following figures :—

Year.	Number of Societies.	Number of Members.	Number of Beasts registered.
1898	187	5,694	14,796
1899	263	9,492	31,015
1900	302	12,314	44,106
1901	312	11,183	43,211
1902	312	11,072	38,140
1903	319	11,475	43,392
1904	310	11,936	38,051
1905	338	13,354	41,584
1906	365	14,455	46,783
1907	382	17,125	49,460

latter the *Boerenbond* is seeking to introduce the Danish system. This has already taken root in Brabant and Limbourg, where several local societies have followed Denmark's example, and have appointed an official who goes round to each farm daily and measures the quality and the quantity of milk given by each cow, so that the farmers may know which cows pay best. These societies propose to use their organisation to obtain accurate statistics of the "power of transformation" of each animal, that is, the relation between the amount of food supplied and the amount and quality of milk produced. The *Boerenbond* does not neglect the conformation of the animals, but regards it as secondary in importance to milking qualities.

The care given by the Belgian people to improving the breeds of lesser animals, such as goats, pigs, and even rabbits, is not without interest. Goats and rabbits are only kept by the smallest cultivators and by working men. The methods used to improve their breeds are very similar to those adopted for horses and cattle—careful choice of male animals, and the annual granting of prizes to those who possess the best stock. Especial attention is paid to the conditions under which the goats are kept, prizes being given periodically for cleanliness. On December 31, 1907, there were 344 societies for improving the breed of goats, all but eleven being in East and West Flanders. The 33,858 members of these societies, which were grouped into three federations, possessed among them 40,493 goats.

Perhaps there is no better illustration of the contrast between Belgian and English methods than the care thus shown to be given to the breeding of goats and rabbits. That there are twenty-four societies, all in West Flanders, devoted to improving the breed of the latter animal, illustrates a marked difference between Belgian and English agriculturists. Whereas the small English cultivators too often neglect matters which appear to be insignificant, the Belgians recognise the immense importance of minutiae, and take advantage of the slightest opportunity of improving the produce from their farms in quality and increasing

it in quantity. Goats, which cost hardly anything to keep, and which can be housed in very little space, supply the Belgian family with milk; while rabbits, which are bought up when they are a few months old by travelling merchants, and are largely fed during the summer months on weeds pulled up in the fields and gardens, make an appreciable addition to the income of those who keep them. In 1908 about 25,000 cases, each containing 120 rabbits, were shipped from Ostend to London. It seems a pity that English small holders and agricultural labourers should neglect this source of revenue, as well as goat-keeping, which would supply them with milk. In 1906 the United Kingdom imported rabbits to the value of over a million pounds.

Before passing to a consideration of other co-operative institutions, a few words must be said of the co-operative dairies. The increase in the number of these in Belgium during the last few years has been very striking, and they now play an important part in agriculture. In 1895 there were only sixty-three co-operative dairies, with 3500 members in the whole of the country. Thirteen years later, at the end of 1907, there were 497 actively at work, with 52,380 members, possessing among them 146,674 cows—the small number of cows per member (an average of 2·8) showing that these dairies are supported by quite small farmers.¹ During 1907 produce to the value of £1,453,738 was sold, equal to £28 per member. The great development of co-operative dairies is not surprising when the marked benefits which they offer are considered. The butter made in them is much more uniform in quality, and, on the whole, much better than that previously made by the peasants, and thus fetches a considerably higher price. In the Campine, for instance, in the years 1904-5-6, dairy butter realised on the average 3d. a lb. more than “Boerenboter,” or peasant butter, as that coming from individual farmers is called. In addition to the higher

¹ According to the 1905 census there were 765,000 milch cows in Belgium. Thus about 19 per cent of the dairy industry is co-operatively managed.

price obtained, the better machinery used in the co-operative dairies results in a much more perfect separation of cream, and consequently in a greater yield of butter per gallon of milk.¹ It has been estimated that on the average the value of the butter produced per cow per annum is £2 higher among co-operators than among other farmers.²

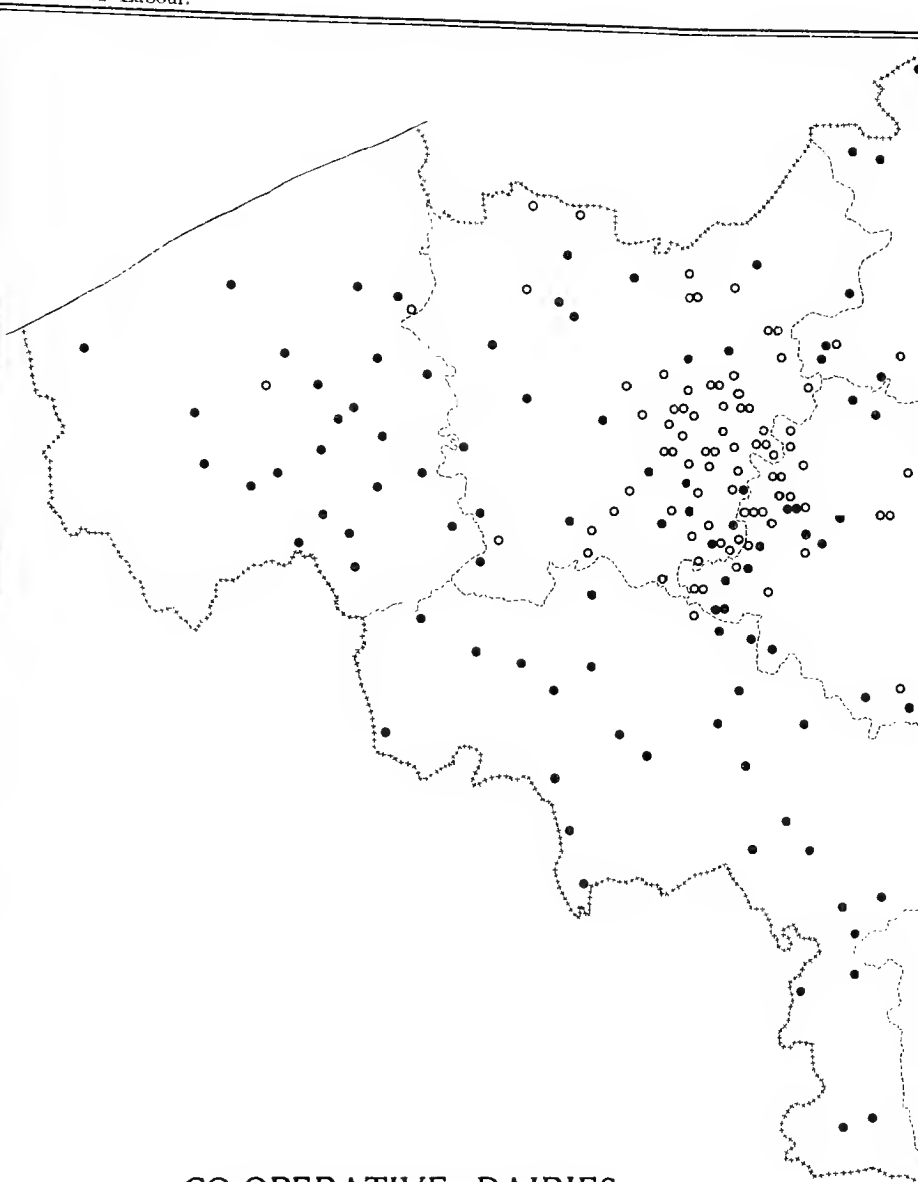
Broadly speaking, co-operative dairies in Belgium are run on two systems. First, as in Limbourg and Antwerp, there are a great number of small ones drawing their supplies of milk straight from the farms; the machinery is worked by hand, and each dairy is responsible for the manufacture and sale of its own butter. In Hainaut and the two Flanders the dairies are larger and supplied from wider areas, with a radius of three, four, or five miles. But under the second system the farmers do not take their milk directly to the dairy but to local dépôts where the cream is separated; it is collected from a number of these dépôts and sent periodically to the large central dairies to be made into butter.³ There are certain advantages in this method, as it is possible to provide better machinery and more skilled oversight in the large dairies than in the small, and thus the quality of the butter is likely to be better.

Co-operative dairies have led to other results, less direct perhaps, but not less important. They have led, for instance, to a very keen competition among co-operators to secure the best cattle and to keep them under the best conditions, and thus a great stimulus is given to the development of the local associations for improving the

¹ Throughout Belgium improved methods of separating cream are being largely used. It is estimated that between 1895 and 1902 the number of cream separators used in the country rose from 2000 to 25,000.

² This estimate is based upon figures collected in 1895 from several dairies, and also upon figures taken out by the Borsbeke co-operative dairy. This is one of the oldest dairies in Belgium. In 1892, according to a report issued from this dairy, the profit per cow per annum was 50s. higher in the case of those farmers who made use of the dairy than in the case of other farmers living in the neighbourhood. In 1893 there was a difference of 58s. per cow per annum in favour of the co-operators.

³ There is very little cheese made in Belgium, and only one co-operative dairy makes it.



CO-OPERATIVE DAIRIES

(December 31st, 1907).

● <i>Dairies employing steam or petrol engines</i>	180
○ <i>Dairies worked by hand</i>	337

breeds of cattle, which have already been referred to. It is noteworthy that in the majority of cases the prizes offered by the *comices* for the best-kept cow-sheds are carried off by co-operators, who are usually obliged by the rules of their society to keep their cow-sheds clean and sanitary.

Another result of co-operative methods is the suppression of a very undesirable custom, whereby peasants who sold their butter to the shopkeepers were compelled to take part of the payment in the form of goods, frequently upon very unfavourable terms. The reduction of the labour on the farms, through the manufacture of the butter at the central dairy, is another advantage to the small holder, who is so often overworked.

We cannot leave the question of co-operative dairies without, however, referring to a fact which operates against the peasant, especially if he be a tenant and not a proprietor. "A co-operative dairy has been started here, so the price of land has gone up," is a remark which has more than once been made to the writer when visiting agricultural districts; and it states one of the usual consequences of the successful establishment of these dairies. Space does not permit of many detailed illustrations, but one or two may be given. At Grand-Brogel, in the Campine, three co-operative dairies have recently been started, leading to great prosperity in the dairy industry. But the peasants whose energy and enterprise have brought about this result are subjected to a heavy "prosperity tax" in the enormous increase of land values. The rent of poor quality land in the district has risen in ten years from £1 : 12s. per acre to £4 : 17s.—a fact hardly calculated to encourage the peasants to take other steps to better their lot.¹

"There is a co-operative dairy here which is doing well, and which has raised the price of land," was a remark made to the writer by a small farmer in Florenville, in the extreme south of Belgium. In the same way an intelligent

¹ It is not argued that co-operation has caused the *whole* of this increase, but it has been an important factor in the agricultural prosperity to which the increase is due.

agricultural labourer in G erouville remarked that "the success of the potato crops and of the co-operative dairy has raised the price of land."

These remarks were not made in criticism of the land system, but simply as evidence of the success of the dairies and crops.

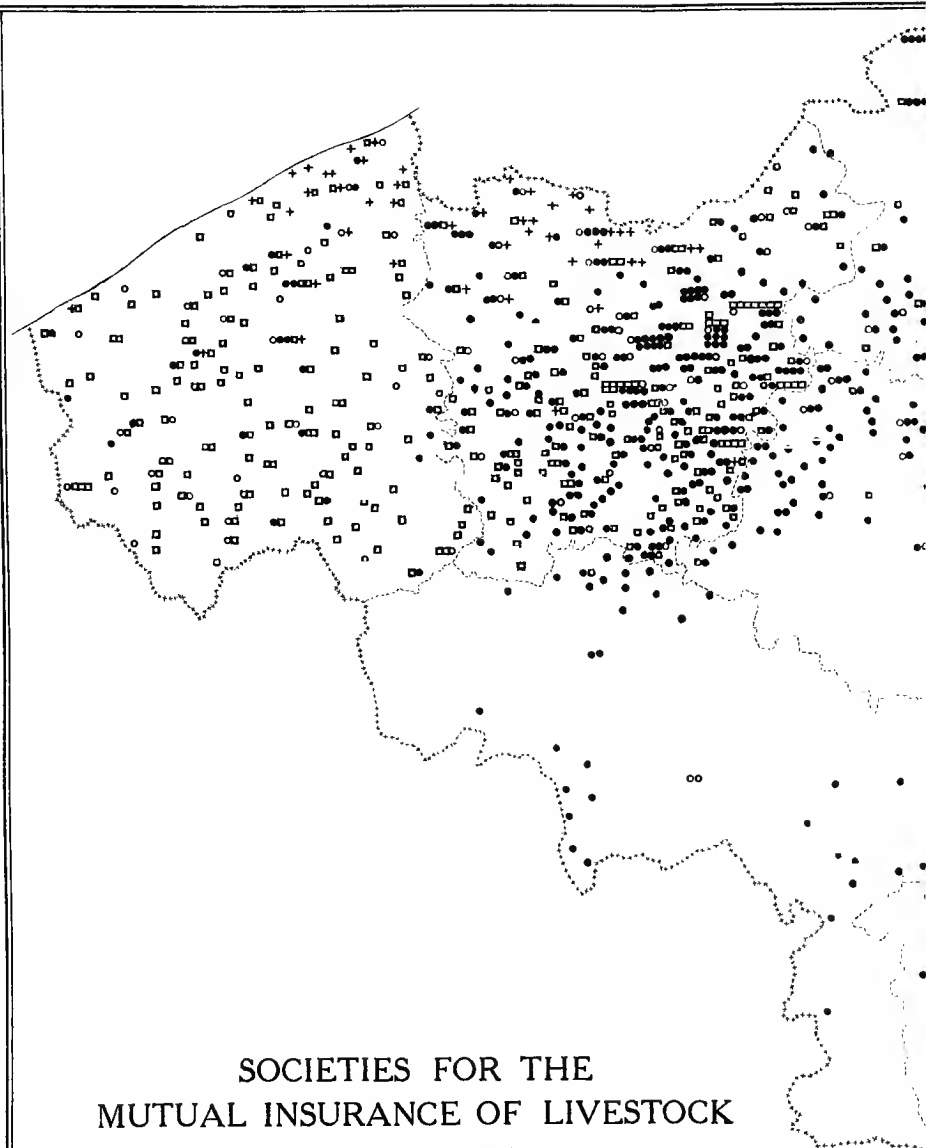
With a view to helping on the dairy industry, in 1897 the Government appointed a number of dairy experts to give advice to farmers as required, and in 1900 a special research station was established at the Government Agricultural College at Gembloux for investigating any scientific problems arising in this connection.

In spite of the great development of the dairy industry during the last ten years, it is still unable to supply the needs of the people. In 1905 Belgium imported nearly 3000 tons of butter and 2700 tons of cheese more than she exported. The excess of imports over exports has risen considerably during the last ten years, especially in the case of butter. This largely increased consumption of a comparatively costly article seems to indicate a rising standard of living in the country.

We now pass to the question of the arrangements made by the Belgian agriculturists for the insurance of their live stock. Here we are brought into contact with facts which will probably surprise some English readers.

Altogether, in Belgium—a country less than twice the size of Yorkshire—there were in 1907 no less than 1622 societies for the mutual insurance of live stock.¹ Formerly the question of compulsory insurance was much discussed; indeed, as stated earlier in this chapter, a Bill was introduced having this for its object, but, largely owing to the opposition organised by the *Boerenbond*, was withdrawn; and now there is only one province, West Flanders, where

¹ Societies for insuring cattle . . .	1023
" " horses . . .	191
" " goats . . .	349
" " pigs . . .	59
	<hr/>
	1622



SOCIETIES FOR THE MUTUAL INSURANCE OF LIVESTOCK

(December 31st, 1907).

	Number	Number of Members
● Societies for the Insurance of Cattle ...	1023	92,833
○ " " " " Horses ...	191	24,145
+ " " " " Pigs ...	59	5,706
□ " " " " Goats ...	349	37,173
△ Branches of the Dinant Society for the Insurance of Livestock.		

insurance has been made compulsory by the provincial Government.¹ With this exception, practically all the insurance of cattle in Belgium is done by small local mutual insurance societies. The compensation, which is given for loss from all causes, is usually two-thirds of the value of the animal insured.

The methods of payment vary in different parts of the country. In Brabant, Liège, Limbourg, and Luxembourg the usual English method of insurance is adopted. A premium of from 1·2 to 1·5 per cent is charged, all compensation being paid out of the societies' funds.

Another system is in vogue in some parts of East Flanders, Antwerp, Hainaut, and Namur. Here the insurance premiums are only 1 or 1·2 per cent, but if the animal which has died is fit for consumption, the flesh is sold to the members of the societies, each being obliged to take a certain quantity, which varies with the number of animals insured by him. The price at which the meat shall be sold is fixed periodically, and the money realised is paid to the farmer who owned the animal, and usually works out at about two-thirds of its value. It is only when the flesh is unfit for consumption that compensation is given out of the ordinary funds of the society. Such facts illustrate the way in which methods for helping the agriculturist vary according to local needs. An English reader, used to huge insurance companies, with a capital of several million pounds, with palatial London offices, and more or less cast-iron systems, may smile at the thought of these little Belgian societies cutting up their dead cows in village sheds, and compelling every member to purchase a certain portion; but the fact remains that these "amusing"

¹ Here the insurance premiums are levied along with the other taxes and are very light, *e.g.* :—

5d.	per annum	for a horse.
2½d.	"	" cow.
¼d.	"	" sheep.

Compensation is only paid where the animal is ordered by the sanitary authorities to be destroyed on account of disease. Even in West Flanders mutual insurance societies flourish, covering risks other than those covered by the compulsory insurance.

methods are just what the people need, and they achieve their object, namely, to reduce the cost of insurance to the lowest possible point. It is not, therefore, surprising to find that the number of cattle insured in 1907 was a quarter of a million (268,464), valued at £3,839,842, and yet the total cost of administration for the 1023 societies was under £1400. But the Belgian insurance is not only cheap, it is safe. The great majority of the small local bodies reinsure a portion of their risks in federal mutual insurance societies, which are subsidised by the central and provincial Governments.¹ Both the federal and the local societies have the right to levy additional contributions from their members in case of need.

In addition to 1023 societies for the insurance of cattle, there are 191 for the insurance of horses, charging premiums of 1·2 to 1·5 per cent, and insuring the animals up to about three-quarters of their value. There are also 59 societies for insuring pigs, charging a premium of 3s. to 4s. per head for insurance up to two-thirds of the value, and 349 societies for insuring sheep and goats, the charge for goats being 5d. for 8s. to 12s., and that for sheep 10d. for 16s. to 24s. insurance. There is no doubt that the development of insurance has been a great advantage to the Belgian small holder. Hitherto when he lost a horse or cow it sometimes meant almost ruin to him, and it was a common thing for collections to be raised in villages to help those who had suffered in this way. Now he is independent of such help, and the figures given above show that he has gained his independence very cheaply.²

Another form of co-operation which is of moment to the Belgian agriculturist is the co-operative purchase of manures, food-stuffs, and other materials. During the last few years this has developed enormously, so that at the

¹ Subsidies are only paid to insurance societies which have applied for legal recognition, and which submit to certain restrictions, but practically all of them are legally recognised.

² The members of the mutual insurance societies are principally small holders. On the average each owns 2·8 cows, 1·8 horses, 1·7 pigs, and 1·2 goats.

end of 1907 there were no less than 1024 co-operative purchase societies, with 58,575 members, their total purchases amounting to nearly one million pounds. The principal items in this account are £500,000, spent upon feeding-stuffs, and £380,000, on manures; £20,000 was spent on agricultural machines, £16,000 on seeds, and £17,000 on other purchases. The growth of these societies has been very rapid; between 1895 and 1905 their number almost trebled and their membership doubled, while the amount of their purchases increased nearly fivefold.

The expenses of administering the societies are reduced to a minimum, and the advantages they offer can be understood by every peasant. The system not only enables him to buy his materials at the very lowest wholesale price, but it guarantees their purity. Buying independently, he could not possibly afford to have them analysed, but to a society purchasing in large quantities, the cost of analysis is insignificant. We can now understand the fact already referred to, that Belgium uses more chemical manure in proportion to her cultivable area than any other country. It is not merely that the level of agricultural knowledge is high and the cost of transport low. These are important factors, but even more important is the system of co-operative purchase. That system has not only lessened the financial strain on the small holder, it has served as an object-lesson and incentive to that extension of the co-operative system which has had, and is having, such a helpful influence on Belgian agriculture.

The whole movement here described has many critics in Belgium, who say that it is artificial, and not the outcome of a true spirit of co-operation among the peasants. According to them, it merely illustrates the activity of the priests and their friends in undertakings destined to strengthen the Church. We need not enter into the discussion of the sources of this movement; whatever these may be, no impartial observer can fail to recognise the far-reaching effects of the movement itself on Belgian agriculture.

CHAPTER XIX

AGRICULTURAL CREDIT SOCIETIES

WE now turn to a matter of serious importance, namely, the provision of cheap credit, "the driving-wheel from which all the machinery of trade and industry derives its impetus." To a great extent the Belgian agriculturist gets money through the usual channels. The large farmer obtains it from his bank, or negotiates some private loan or mortgage. But small farmers and peasants do not make much use of ordinary banks. They often get loans from their landlords, either directly, at a reasonable interest of 4 or $4\frac{1}{2}$ per cent, or indirectly, by being allowed to let their rent run on. Too frequently, however, they borrow from the merchants who supply them with chemical manures and feeding-stuffs. This is a particularly unsatisfactory way of getting credit, for it places the borrower at the mercy of the dealer, who can charge exorbitant prices for future supplies of goods, almost regardless of their quality. Such loans usually take the form of deferred payments for goods supplied, and hence the farmer, while he actually pays very heavy interest, imagines that he is paying none. By the Belgian law, moreover, the merchant may become a privileged creditor, taking precedence, along with the landlord, of other creditors if the farmer is sold up. Those farmers who do not or cannot obtain enough money from their landlords or from the manure merchants sometimes apply to lawyers who lend money upon security of land or goods. This is a costly process, as the lawyers usually demand 5 or 6 per cent, plus legal charges. Professional money-lenders also ply

their trade among the Belgian peasantry, and many a hard-won homestead has passed into their hands.

At last, however, the *Raiffeisen* banks have made their appearance in Belgium. The first was established in 1892, and their growth has been continuous and rapid.

The system of co-operative credit banks which is associated with the name of Raiffeisen is too well known to need more than a brief description. Raiffeisen was a German philanthropist who conceived the idea of helping the peasants in his own village by establishing a bank upon what was then a new principle. There were to be no paid officials and no capital in the ordinary sense, and any profits realised were to be devoted to the creation of a reserve fund. A group of men living in the village or its immediate locality formed a society to secure loans for any of its members, each accepting unlimited liability for their repayment. Obviously, under such circumstances, no one who was likely to waste loans or whose reputation for agricultural ability was doubtful was allowed to join, since the capital of the society was practically the character of its members. This little "loan fund," started by Raiffeisen in 1849 at Flammersfeld, in Germany, was destined to be the precursor of a movement bringing relief and prosperity to untold thousands of peasants, not in Germany alone but in Austria, Italy, Belgium, France, and other countries. The unlimited liability of each member, which at first sight might seem a disadvantage, is in reality essential to success. It inspires such confidence among capitalists that, where the system is understood, the banks can generally borrow on favourable terms.

These *Raiffeisen* banks are likely to be an important factor in the development of Belgian agriculture, seeing that, at the end of 1907, 523 had been already established, with nearly 25,000 members, lending annually a sum of nearly £160,000, and receiving about twice that amount in deposits. Each of them limits its operation to a single commune, it being one of their essential characteristics that, depending as they do upon each member's

personal knowledge of the others, they shall operate locally. The movement, though still only in its infancy, since there are more than two thousand communes where no bank exists, is steadily growing, as is shown by its increasing number of centres and its enlarging business.¹

Besides granting loans to their members, the banks receive deposits from them; and, as a matter of fact, the latter are considerably in excess of the former. In the early days money was borrowed from the Government Savings Bank for the granting of loans; but now the process is reversed and the surplus deposits are placed by the local banks with the central Government savings bank.

The confidence displayed by the depositors in the *Raiffeisen* banks is not misplaced, for although they have no capital,² and although the reserve fund is not very great,

¹ RAIFFEISEN BANKS (a)

Year.	No. of Banks.	No. of Members.	No. of Loans.	Amount of	Average	Amount of Deposits.
				Loans.	Amount of each Loan.	
				£	£ s. d.	£
1895	33	1,160	266	4,424	16 14 0	10,412
1896	77	2,853	765	11,283	14 15 0	18,394
1897	158	5,689	1371	18,698	13 13 0	52,095
1898	199	7,812	1933	29,617	15 6 0	82,622
1899	229	9,593	2065	42,159	20 8 0	89,992
1900	264	11,669	2269	61,796	27 5 0	117,211
1901	286	13,308	2678	76,241	28 10 0	172,333
1902	313	15,348	2879	72,040	25 0 0	230,246
1903	359	17,646	2978	93,234	31 6 0	281,497
1904	397	17,821	3065	107,985	35 4 0	242,851
1905	428	19,972	3053	110,499	36 4 0	265,187
1906	469	21,607	3616	128,517	35 11 0	235,319
1907	523	24,194	3626	156,041	43 1 0	278,850
1908	584	?	?	?	?	?

(a) Prior to 1904 the *Raiffeisen* banks offered better terms to depositors than the State Savings Bank (*Caisse d'épargne*). The reduction in deposits in 1904 as compared with 1903 is due to the fact that this comparative advantage came to an end in 1904.

² This is practically true, but the Belgian law requires that co-operative societies should have a capital, should pay a dividend, and should only be constituted for a limited period of years, not exceeding thirty, with the power, however, of renewal. Raiffeisen, it will be remembered, felt it essential that the banks he established should have no capital, should not

there has never been a single case in Belgium nor, so far as the writer is aware, elsewhere, of the failure of such a bank. The villagers when starting a fresh one usually get one or two well-to-do persons to join them. This inspires confidence, not only because it strengthens the bank's financial position, but because it is generally felt that people who are not themselves likely to need loans would not accept unlimited liability in the society unless they were sure that no serious claims would be made upon them.

True to the method which is adopted by nearly all social organisations in Belgium, the local banks are gathered into federations—in this case six in number—the most important of them being the *Boerenbond*, to which 286 local banks were affiliated at the end of 1908. The federal authorities exercise the necessary supervision and control, but leave the greatest possible freedom to each particular bank. The responsibilities undertaken by the federations or Central Credit Banks are three-fold:—

1. To audit the accounts of the local banks.
2. To guarantee any loans they may have effected from the State Savings Bank.
3. To receive from local banks the excess of deposits over loans granted, and to pass these over to other local banks, whose demands for money exceed the sums deposited.

The accounts are audited by a professional accountant, the Government for this purpose making a grant to the Central Institution of £1 on account of every local bank.

The central organisation also helps to spread the system distribute dividends, and should be constituted for an unlimited period of time. The letter of the Belgian law is carried out without really interfering with Raiffeisen's principles. Each member of a bank in Belgium subscribes half-a-crown or less, and it never declares a dividend of more than 5 per cent of the capital subscribed. Thus the annual dividend cannot exceed three half-pence per member, for no one member may subscribe more than half-a-crown. Then, with regard to the dissolution of the society at the end of thirty years, the banks stipulate in the statutes that in case of dissolution part of the reserve fund accumulated shall go to the central bank (see above) and the rest be distributed for educational and similar purposes. Thus all inducement to break up a bank for the purpose of obtaining the immediate benefit derivable from a distribution of the reserve fund is removed.

in new localities wherever openings exist, sending down speakers who explain the scheme to the villagers and give full particulars as to how a bank may be started. As a certain slight initial expenditure on account books, etc., is inevitable, the Government, in order to encourage the movement, makes a grant of £4 to every newly founded local bank.

Raiffeisen banks are used chiefly by very small farmers and by peasant cultivators. In 1907, 3626 loans were granted, nearly one-half of them for sums of less than £10.¹ It will serve to bring home to the reader the important part these little banks play in the life of the agriculturist if, instead of dealing with figures, we examine the actual purposes to which loans are put. Take the commune of Rillaer, in Brabant, with a population of 2564. From the 4th December 1892 to the 16th June 1901 the credit bank in this commune granted 191 loans, amounting in all to £2627; 110 of these were for the purchase of cows, 34 for the purchase, construction, or repair of houses, 7 for trading capital, 3 for setting young couples up in their homes, 5 for the purchase of land, 3 for the *paiement de soulte* on the division of a property,² 2 for the purchase of a horse, 13 for the repayment of debts contracted at usurious interest, and 14 for various objects. This example may be taken as typical.

The regular rate of interest charged to borrowers is 4 per cent, while 3 per cent is allowed on money left on deposit. The difference, less a small deduction for expenses of management, goes to a reserve fund.

To describe these credit banks without some reference to

¹ Number of loans granted in 1907, 3626.

Total amount of these loans, £156,041.

Loans of less than £10	1690	for a sum of	£16,684
,, £10 to £20	1200	,, ,,	£23,232
,, £20 ,, £40	440	,, ,,	£16,808
,, £40 and more	296	,, ,,	£99,317

See p. 26 of *Exposé statistique de la situation des associations d'intérêt agricole* for 1907.

² *Soulte* is the sum payable in cash by any heir who has received more than his fair share of landed property on the division of an estate.

the important indirect consequences, which in Belgium, as elsewhere, have followed their establishment, would be to give a very false idea of their value. Wherever they exist, it is found that they have not only provided cheap credit, but raised the moral tone of the neighbourhood, for no drunkard or improvident person, no one, in fact, whose life fails to command the confidence of the society, can be admitted to them. Many a man has pulled himself together in order to be able to join, and frequently the parish priest admits that the local bank has done more to make his village exemplary than all his teaching.¹

The introduction of a *Raiffeisen* bank into a village tends also to give local initiative free play. The knowledge that at last the difficulty of obtaining credit for bona-fide and judicious enterprise has been overcome, leads to many fresh departures in agriculture that otherwise would have been impossible.

In Luxembourg, for instance, through the agency of these rural banks, cultivators have grouped together and purchased threshing machines. Such machinery is especially valuable in the district, as labour is difficult to obtain and comparatively dear.

In conclusion, it would seem that this system of providing credit is becoming firmly established in Belgium, and is likely to develop, although there will, no doubt, always be a number of people who prefer the privacy of the old methods of borrowing money, even if they involve a higher rate of interest.²

¹ For a very interesting account of the work of Credit Banks, see *Agricultural Banks—Their Object and their Work*, by H. W. Wolff.

² In addition to the *Raiffeisen* banks, there are two agricultural *Schulze-Delitsch* banks in Belgium. These were instituted before 1892, but their number has not grown, although the two existing banks are doing a steadily increasing business. The *Schulze-Delitsch* credit bank system is merely that of an ordinary dividend-earning commercial company, but it usually has unlimited liability. A single share admits to membership, but as the price of shares is considerable, from the small holder's point of view, his neglect of the system is explicable. Artisans, however, have profited by the *Schulze-Delitsch* scheme both in Belgium and elsewhere; its unlimited liability has contributed to the solidarity of their interests, and the banks have provided a good avenue for the profitable use of their savings.

It is not, however, only the small farmers and peasants whose needs have been thus wisely met. In order to help the larger farmers, the Government, in 1884, passed a law which led to the creation of a number of institutions known as *Comptoirs agricoles*, or agricultural banks. Each of these institutions consists of three, four, or five persons, who negotiate loans to farmers. They provide no capital themselves, but borrow all they require from the National Savings Bank, giving to that institution their personal guarantee for the repayment of the money, and receiving in return one-fifth of the interest charged to the borrower. This system is another interesting illustration of the way in which the Belgian Government obtains the services and the supervision of local people for the furthering of its ends.¹ At the end of 1907 there were eleven *Comptoirs agricoles*, with 2755 loans actually running, the total amount of which came to £425,925.²

One aspect of agricultural credit to which we have not yet adverted is the supply of long-term loans for twenty or thirty years. In reality such long-term loans are contrary to the principles under which *Raiffeisen* banks are

¹ The organisation of the light railways in Belgium is a striking illustration of this. See Chapter XXI.

² The growing popularity of the *Comptoirs agricoles* is shown by the following figures:—

Year.	Number of Comptoirs.	Number of Loans granted during the Year.	Total Amount of Loans.
1895	3	63	£20,179
1900	9	227	51,844
1904	8	337 ^(a)	57,414
1905	11	370	60,849
1906	11	506	85,112
1907	11	669	120,917

^(a) The 337 loans of the year 1904 are divided according to their importance in the following way:—

Loans of less than £40	30	for a total sum of £753.
„ from £40 to £400	291	„ „ „ £40,681.
„ „ £400 „ £2000	15	„ „ „ £13,380.
„ „ £2000 and more	1	„ „ „ £2600.

constituted, and Government savings banks are forbidden to give loans exceeding fifteen years in duration. In order to obviate this difficulty the *Caisse centrale* of the *Boerenbond* created, in 1904, a special branch for providing funds for this purpose. It issues bonds for £4, £20, or £40, with interest payable at $3\frac{1}{4}$ per cent, the sale of which brings in the capital necessary for long-term loans. These bonds become payable by drawing lots as soon as borrowers on mortgage repay their loans. The total value of the bonds issued must never exceed the total of the loans made by the *Caisse centrale* and by the local banks.

These bonds constitute an investment of the first order, guaranteed not only by the capital and reserve of the *Caisse centrale*, but by the unlimited liability of the local banks making the agricultural loans. Generally long-term loans are effected through the local banks; but any one in a district which has no branch affiliated to the *Boerenbond* may apply direct to the *Caisse centrale*. The local banks pay $3\frac{1}{2}$ per cent for the accommodation afforded by the *Caisse centrale* and charge $3\frac{3}{4}$ per cent; those dealing direct with the central bank pay $3\frac{7}{8}$ per cent. In every case 1 per cent is added to the interest, which addition constitutes a sinking fund, wiping off the debt in thirty years. No loan is given without an understanding from the borrower that the redemption will be effected; but should a borrower wish to redeem his mortgage before it matures, he is allowed to do so.

We have gone at some length into the Belgian arrangements for providing credit to those engaged in agriculture, because the subject is of such great importance. We have noted how the Government furthers in every way in its power the efforts of private societies which are seeking to provide peasant cultivators and small farmers with money upon reasonable terms. We have seen, too, how through what appears to be a singularly wise arrangement, the Government meets the needs of the larger farmers, and, lastly, the excellent provisions made by the *Boerenbond* for long-term loans. The whole question of credit must be

faced by the British people if the Small Holdings movement is to succeed; and although the Belgian systems have not yet, by any means, spread over the whole country, they seem to be upon sound lines, and are worthy of careful study.

PART IV

SOME FACTORS INFLUENCING AGRICULTURAL
AND INDUSTRIAL PROSPERITY

CHAPTER XX

EDUCATION

THE student of a nation's social and economic development instinctively turns for guidance to her educational system.

The history of education in Belgium is one of incessant dispute between religious and political parties, the question at issue being whether it should be controlled by the Church or by the State. The solution seems no nearer than it was fifty years ago, and, meanwhile, education itself suffers severely. The English people know something of what is called "the religious difficulty" in schools, and bitter feelings have sprung up on either side, but they are mild compared with the antagonism roused in Belgium.

In order to understand present conditions, the history of elementary education in Belgium must be briefly outlined. In 1830 the Catholics and Liberals united to throw off the Dutch yoke, but when this was done, their ways soon parted. That, no doubt, was inevitable, for the standpoints from which they viewed the question of education were and are fundamentally different. The contention of the Liberals, and in more recent times of the Socialists, is that education in elementary schools should be neutral in character so far as the teaching of religion is concerned, and that when paid for by public money it should be publicly controlled. That of the Catholics is expressed in an encyclical published in 1897 by Pope Leo XIII., according to which "Not only must religion be taught to the children at certain hours, but all the rest of the instruction must exhale Christian piety as a perfume, and every kind of teaching, whatever

may be its specific nature, must be penetrated and dominated by religion.”¹

In the Belgian constitution, framed in 1830, it was enacted that any one should be at liberty to teach without restriction. The Catholics immediately took advantage of this privilege; and so active were they that ten years after Belgium was constituted a separate kingdom, nearly one-half of the schools (2284 out of 5189) were entirely maintained and managed by them, without taking into account the State-aided schools placed under their care. The Liberals, fearing that the clergy would “monopolise the education of youth,” set on foot an agitation for direct and systematic intervention of the State in the matter of elementary instruction. Eventually, a compromise was agreed on in the law of 1842, by which the Catholics accorded a large measure of authority to the State, while the Liberals agreed to the official intervention of the clergy. The law made the teaching of religion obligatory in all elementary schools receiving Government grants, and placed it under the sole charge of the clergy, who were entitled to enter the schools at any time to see that it was being properly given. In addition, they were to control moral teaching of all kinds, and could veto the use of any reading-books of which they disapproved. This law remained in force until the advent of the Liberal party to power in 1878. They immediately took strong action, and placed the whole control of State-aided elementary education in the hands of the Government. The Education Act which they passed in 1879, called by the Catholics *la Loi de Malheur*, declared that public education must depend exclusively on the civil authority. In future no grants were to be given to any schools which did not submit to Government inspection and conform to certain prescribed conditions. A place in

¹ In a pamphlet entitled “The Battle of the Schools in Belgium,” the author (M. Pierre Verhaegen) says, “The Catholics remained convinced that the business of the State in the matter of education was to encourage private initiative and to supplement its inefficiency, since in itself Government is incompetent either to educate or to direct the education of the people.”

This pamphlet gives a vivid account of *La Lutte scolaire*.

the schools was to be put at the disposal of ministers of religion, that they might give religious instruction, either before or after school hours, to the scholars of their own community. In case the priests declined to give this instruction, the schoolmaster was authorised, if the communal authorities so desired, to teach the letter of the diocesan catechism without explanation or comment. No religious instruction was to be given during school hours.

The terms of this law were entirely opposed to the conviction of the Catholics that education is primarily a matter for the Church, and that the State only takes part in it (except for the payment of the cost) by her permission ; and no sooner was the law passed than they rose up in arms to defeat it. Priests were forbidden to give any religious instruction in the undenominational schools, and ordered to dissuade their flocks from taking part or lot in them. Under pain of a grievous neglect of duty, each *curé* was to make every effort to obtain a Catholic school in his parish. Parents were forbidden to send their children to the public schools. Teachers and inspectors, if they wished for absolution from their sins, must no longer accept employment in them. These instructions were carried out to the letter in every diocese and propagated from all pulpits and by the entire Catholic press. *La Lutte scolaire* had begun in real earnest, and the condition of the country bordered on civil war. Churches were turned into propagandist platforms ; wives were told by the clergy to disobey their husbands, and children to disobey their parents on the question of attending neutral schools ; the faithful were exhorted, if necessary, to shed their last drop of blood in defence of their Church. People with Liberal views were boycotted ; the sacraments were denied them, and if they were poor they were refused assistance ; if farmers, they were evicted by landlords acting under the influence of the *curé*. Every possible measure was taken by the Church to empty the neutral schools and to create a system of definitely Catholic education, and to this end almost incredible acts of devotion were performed. Poor priests,

who were growing old, gave up the whole of their savings to build Catholic schools. Men laboured with feverish activity to prepare buildings where the children of the faithful might be taught, away from the malign influence of undenominationalism. Meanwhile, education was given in stables, barns, wine-shops—whatever could provide shelter from wind and rain.

The Liberals, without any power corresponding to that of the priests, could not put the same pressure upon the people; but still, we read how they refused charitable assistance to those who sent their children to Catholic schools, and how some Liberal employers made the attendance of their workpeople's children at a neutral school a condition of employment.

Education was, indeed, in a state of hopeless disorganisation. All the teachers whom the Catholic Church could influence refused to remain in the communal schools, leaving thousands of vacancies to be filled up. Meanwhile, the Catholics had founded no less than two thousand schools in twelve months, for which the supply of teachers was utterly inadequate. As a consequence, the sacristans, choir-men, and others became schoolmasters, and seminarists interrupted their studies in order to fill up the vacant posts. Young men who taught in night schools and Sunday schools gave up their days to tuition, and domestic servants and others entirely unfitted were pressed into service. In many of the communal schools the teachers were no better.

This state of disorganisation had continued for five years, when, in 1884, the Liberal Government was overthrown. It has never been in power since. No sooner did the Catholics take the helm than they reversed the whole educational policy of the former Government, and although the teaching of religion was not made compulsory in all schools, it was permitted everywhere during school hours, with the proviso that children might be exempted from attending the classes on the written application of their parents. Large grants were made from public funds to Catholic schools which submitted to Government in-

spection, and the majority of the Government training colleges were closed, the State grants being transferred to others under the control of the Church.

It was not unnatural that the Catholic majority in the country should seek to strengthen the influence of its own Church in the education of the children, but the minority, consisting of Liberals and Socialists, hotly opposed this policy, and the bitter antagonism between them still continues. So hostile is the feeling that it is very difficult to obtain unbiassed information from either party. The Catholics maintain that although primary education in Belgium still leaves room for improvement, there is not much to complain of, and it is the best that can be given under the circumstances. On the other hand, the Liberals and Socialists are sweeping in their condemnation of the system, and declare that, taking the country as a whole, the standard of education is exceedingly low. They assert that even official statistics are presented in such a way as to give an impression that the education is much better than is really the case. The writer certainly found it very difficult to investigate the matter adequately. Although, in his other enquiries, the Government placed the greatest facilities in his hands, his efforts to obtain a general permission to visit schools entirely failed, and while he and his helpers did visit a considerable number in different parts of Belgium, the majority of them were communal. The request to be allowed to inspect a Church school was many a time refused. The investigation into the efficiency of the educational system was, therefore, seriously handicapped; but it has been conducted throughout with the sincere desire to remain free from party bias.

The first facts to be noted in this connection are that elementary education is, with a few unimportant exceptions, free, and that it is not compulsory. With the exception of Russia, Belgium is the only country in Europe which has no system of compulsory education inscribed on its statute books, though in some countries the law is disregarded. The Socialists and Liberals are strongly in

favour of introducing a compulsory system, but they are steadfastly opposed by the Catholics, who maintain that such a proceeding would be hostile to the spirit of liberty so dear to the Belgian people. They also fear that to make education compulsory would be to introduce the thin end of the wedge of complete Government control of the schools.

There is much difference of opinion as to the actual proportion of children in Belgium who never go to school, but all agree that it is considerable. The official statistics estimate it at 10 per cent, but the Liberals and Socialists say that it is far greater, and name 16 per cent as a more likely figure. The writer has carefully examined the methods by which each party has arrived at its result, and finds that neither estimate is convincing, since the data necessary to establish it are absent. The facts, however, seem to indicate that the Government figure of 10 per cent is distinctly an under-estimate.

The proportion of uneducated children varies enormously from district to district. It is much smaller in the Walloon than in the Flemish provinces, falling to the lowest point in Luxembourg. In the large towns, all over the country, almost every child goes to school. On the other hand, in some of the poorer country districts in Flanders, it is asserted that almost half the children either do not attend at all, or else go so irregularly that they grow up practically without school instruction.

Attendance is much more regular in some districts than in others. In some country schools four-fifths of the children stay away for weeks together during the summer to help at home and in the fields. According to official statistics, the average attendance per child is 195¹ days

¹ For the school year 1904-1905 the figures are as follows :—

	Days per year.
Communal schools	189·41
Adopted * „	206·14
Adoptable * „	198·16
Average	195·11

(*Rapport triennal sur la situation de l'Instruction primaire, 1903-1905*, p. cxxix.).

* See pp. 271-2.

per year; but if half-holidays be allowed for, it may safely be said that less than half the year is spent at school.

A rough test of the efficiency of a country's educational system is the proportion of the population able to read and write. The published statistics of illiteracy show that, in 1900, 19 per cent of the population above eight years of age could neither read nor write. The proportion was highest in the Flemish provinces, especially in East and West Flanders, and lowest in the Walloon provinces, Luxembourg showing the minimum of illiteracy. Figures are also published giving the proportion of illiterates among those who were called on to serve in the army during 1908, though these cannot be looked on as representative of the population generally. Of 63,000 men 7 per cent could neither read nor write, $1\frac{1}{2}$ per cent could read but not write, 42 per cent could read and write, but had no further education, and $49\frac{1}{2}$ per cent were better educated.¹ Unfortunately, however, none of the published figures bearing on this subject, whether official or otherwise, meet with general acceptance. In order, therefore, to arrive at an independent estimate of the extent of illiteracy in Belgium, and to ascertain whether it was confined principally to the old or prevailed among people of all ages, the writer took a special census. This was done in connection with an enquiry into the housing conditions, which covered many different parts of the country, and of which details will be found on p. 435. This enquiry, which embraced, in about equal proportions, all grades of the working classes, covered 13,270 persons over the age of ten (6915 men and 6355 women) distributed over eighty-six French- and thirty-nine Flemish-speaking communes, with, in addition, the four towns of Liège, Antwerp, Ghent, and Brussels and six suburban communes. The result of the investigation is given in the following table:—

¹ *Annuaire statistique*, 1909, p. 229.

[TABLE

ILLITERATES CLASSIFIED ACCORDING TO LOCALITY

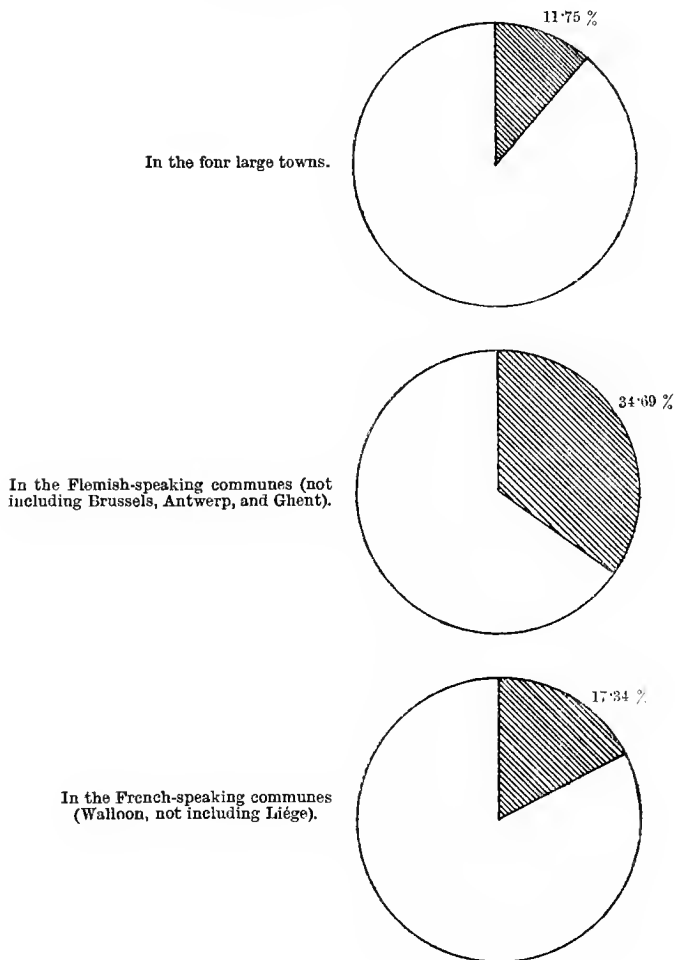
(Working Classes only)

		Number of Persons Investigated (all over 10 years old).	Percentage of Illiterates.
In four large towns	{ Males . . .	1447	10·00
	{ Females . . .	1243	13·67
	{ Together . . .	2690	11·75
In Flemish-speak- ing communes	{ Males . . .	2050	29·31
	{ Females . . .	1922	40·42
	{ Together . . .	3972	34·69
In French-speak- ing communes	{ Males . . .	3418	15·68
	{ Females . . .	3190	19·12
	{ Together . . .	6608	17·34
Totals . . .	{ Males . . .	6915	18·55
	{ Females . . .	6355	24·50
	{ Total . . .	13,270	21·40

An examination of the table shows that $21\frac{1}{2}$ per cent of the working-class population over ten years of age are unable to read or write. This figure agrees pretty closely with that given in the Census, namely 19 per cent, which purports to be the proportion of the whole population over eight years of age who are entirely illiterate. As was to be expected, the proportion of illiterate persons is higher among women than among men,—one in four of the women, and one in five of the men.¹

¹ The writer has tried to obtain trustworthy statistics of illiteracy for Great Britain and other countries, which might be compared with the Belgian figures, but without success. Figures are available for certain sections of the community (*e.g.* recruits, persons signing marriage registers, and voters), but these groups differ so much in composition in the different countries that they are not comparable. In the same way, returns of illiteracy published for some countries in connection with the population censuses are not comparable, because in certain cases they refer to all persons over six, and in others only to those over eleven or twelve years of age.

PERCENTAGE OF ILLITERATES AMONG THE WORKING-CLASS
POPULATION IN BELGIUM



The proportion of illiterates among the working classes in Belgium varies greatly from one district to another. It is lowest in the four large towns (12 per cent), then come the French-speaking communes, with $17\frac{1}{2}$ per cent, and lastly the Flemish provinces, where more than one-third of the whole population over ten years of age is illiterate. It is a striking fact that there should be twice as many illiterate persons in the Flemish as in the Walloon districts of Belgium, and it cannot fail to have a bearing upon the relative social well-being of these two peoples. Until the standard of education is raised, the Flemish people will be seriously handicapped in their efforts to improve their social status. The Flemish provinces are the great stronghold of Roman Catholicism in Belgium, and the Liberals and Socialists maintain that this largely accounts for the low educational standard, since the Catholic influence does not favour progress. On the other hand, a Roman Catholic priest, when discussing the matter with the writer, said that Catholics could obtain better educational results than other parties, because they insisted upon a certain degree of education before they would allow a child to take the First Communion, and this acted as a strong inducement to parents to send their children to school.

The facts disclosed by the above table, however, make it perfectly evident that for some reason the educational standard is very much lower in the Flemish than in the Walloon provinces. The writer does not forget the great financial sacrifices which the Catholics have made on behalf of their schools, but it seems clear that these have been prompted by loyalty to the Church and the desire to keep the children under Catholic influences, rather than by pure interest in education for its own sake.

In order to appreciate the full meaning of the illiteracy statistics, illiterate persons must be classified according to age. This is done in the following table:—

[TABLE

ILLITERATES CLASSIFIED ACCORDING TO AGE

(Working Classes only)

		10 to 20 years.		21 to 40 years.		Over 40 years.	
		Number of Persons Investigated.	Percentage of Illiterates.	Number of Persons Investigated.	Percentage of Illiterates.	Number of Persons Investigated.	Percentage of Illiterates.
Large Towns	Male .	549	10·37	577	7·27	321	14·64
	Female .	395	8·10	547	9·01	301	29·56
	Together	944	9·42	1124	8·09	622	21·86
Flemish	Male .	784	25·63	815	21·59	451	49·66
	Female .	690	26·22	795	33·23	437	66·81
	Together	1474	25·84	1610	29·81	888	58·10
Walloon	Male .	1153	7·11	1422	14·13	843	30·01
	Female .	1062	6·40	1333	16·12	795	41·13
	Together	2215	6·77	2755	15·10	1638	36·02
Whole Country	Male .	2486	13·67	2814	14·53	1615	32·44
	Female .	2147	13·08	2675	21·23	1533	46·18
	Together	4633	13·43	5489	17·98	3148	39·13

The table shows that, taking the country as a whole, 40 per cent of the working classes over forty years of age can neither read nor write. The proportion drops to 18 per cent in the case of those aged from twenty-one to forty, and to 13 per cent for those from ten to twenty. These figures point to a steady improvement in the educational standard, but the proportion of illiterates among the rising generation remains appallingly high.¹ In considering all the above figures it

¹ It will be noted that in the case of males in the large towns and in the Flemish-speaking communes the proportion of illiterates is higher among those between ten and twenty than those between twenty-one and forty. The writer is unable to explain this fact. The enquiry was carefully made, and the calculations have been so checked as to admit of no possibility of error. All doubtful replies were eliminated in making up the statistics. The figures would only appear to be explicable by one of the two following theories: (1) That education was better in those districts some years ago than at the present time. The figures for the women, however, contradict this theory. (2) That men of twenty years and more have made especially good use of continuation schools. This may partly account for the figures, but does not wholly explain them.

should be borne in mind that they refer only to those who can neither read nor write. If account had also been taken of those who can read but not write, the proportion of illiterates would have been higher.

One other point must be noted, namely, that owing to the desire of many people to hide their ignorance, the returns of the number of illiterates are likely to be below, rather than above, the actual facts of the case. The facts which have been given concerning the prevalence of illiteracy among the Belgian working classes are corroborated by the results of an enquiry made in 1908 by M. Buysse, Director of the Technical College of Charleroi, into the number of illiterates among the workers in a coal mine near that town. He found that of 1227 men employed, 525, or 42 per cent, were unable to sign their own names. Among the workers underground this percentage was 47, while among those engaged on the surface it was 31.

The course of instruction at the State subsidised schools is arranged to take either four or six years for its completion. By far the greater number of children stay for the shorter period, and even less. Of the 118,700 children who left the elementary schools during the year 1904-1905, 25 per cent had attended for less than four years, 53 per cent had taken the four years' course, and only 22 per cent had completed the six years' course.¹ In Belgium the children leave school earlier than in England and Wales. Whereas in England and Wales 16 per cent of the school population is above twelve years of age, in Belgium the percentage is only 10. Apart from the Infant Schools, the attendances in Belgium are largest between the seventh and ninth year of age; they begin to decline at the ninth, and fall rapidly at the eleventh year. After the age of fourteen scarcely any children are left in the elementary schools.

¹ These 118,700 children who are returned as leaving the elementary schools do not include 48,245 children who pass on to secondary ones and other educational establishments (*Rapport triennal*, p. cxxx.).

SCHOLARS IN THE ELEMENTARY SCHOOLS, CLASSIFIED ACCORDING
TO AGE¹

	BELGIUM (1905).		ENGLAND AND WALES (1902-1903).	
	Number.	Percentage.	Number.	Percentage.
Infant schools . . .	258,100	22.9	1,861,149	31.1
Less than 6 years	13,800	1.2		
From 6 to 7 years . . .	126,100	11.2		
„ 7 „ 8 „ . . .	132,900	11.8	3,158,981	52.7
„ 8 „ 9 „ . . .	132,300	11.7		
„ 9 „ 10 „ . . .	127,400	11.3		
„ 10 „ 11 „ . . .	119,000	10.5		
„ 11 „ 12 „ . . .	102,300	9.1		
„ 12 „ 13 „ . . .	70,000	6.2		
„ 13 „ 14 „ . . .	38,400	3.4	972,903	16.2
Over 14 years . . .	8,700	0.7		
Total . . .	1,129,000	100 100	5,993,033	100

In towns and industrial districts, children usually stay at school much longer than in the country, because they may not begin factory work until they are twelve years old, whereas there is no such restriction on agricultural labour. But even in towns it is very difficult to keep children at school after they have been confirmed, which event usually takes place when they are between eleven and twelve years old.

In addition to a small number of schools which receive no Government grant and are not inspected, primary education in Belgium is carried on in schools of three types, namely, communal, "adopted," and "adoptable." The last two are practically all denominational (*i.e.* Catholic). Some account of the differences existing between these three types will now be given.

¹ Children in infant schools are included to make the Belgian and English figures comparable.

It must be noted that 41,900 scholars of less than fourteen years of age were inscribed on the lists of continuation schools in the same year, and this is held by the education authorities to make good to some extent the poor attendances at the higher grades of elementary schools. But the attendance of many of those inscribed on the registers of the continuation schools is exceedingly irregular.

1. COMMUNAL SCHOOLS

The organisation of education in Belgium is left very largely in the hands of the communes, with only a small amount of State control. For instance, although by law each of the 2627 communes into which Belgium is divided must have at least one communal school,¹ the number of schools in excess of this minimum is entirely fixed by the local authorities. The communes are also empowered to fix the number of teachers, the methods to be employed in teaching, the number of school hours per day, and the length of holidays, and entirely to control the appointment and dismissal of teachers. But all teachers must be certificated and must be paid at least the minimum salary fixed by the State. The central Government gives a list of subjects which must be taught in every school, but each commune is at liberty to make such additions to the curriculum as it wishes.² The school buildings are constructed and maintained by the communes, and the management of the schools is in the hands of the communal councils, which are popularly elected bodies.³

This communal autonomy results in a standard of education which varies enormously from one district to another. Where the communal authorities are keen educationalists, as is the case, for instance, in Antwerp, Ghent, and Brussels, the standard of education is high. But, on

¹ Two small adjacent communes may, with special permission from the Government, have one school jointly, and permission is sometimes granted for special reasons to suppress the communal school in favour of an adopted school (see p. 271). In 1906 this occurred in 180 communes.

² The minimum curriculum which the Government demands in the case of all schools which earn grants includes reading, writing, arithmetic, the system of weights and measures, the local language (*i.e.* either French or Flemish), the elements of geography and Belgian history, religion, drawing, singing, gymnastics, hygiene, and, in addition, needlework for girls, and the elements of agriculture for boys in rural schools. Besides naming the subjects to be taught, the Government has drawn up a model programme indicating the length of time to be devoted to each subject, and although this is not compulsory it is very generally followed.

³ These councils may be compared to the Town and District Councils in England, but they also perform the work done in England by the Poor Law Guardians.

the other hand, where the local authorities are indifferent to education, there is little to prevent its falling to a very low level.

2. "ADOPTED" SCHOOLS

Any commune which has established its single communal school required by law may arrange with other schools in the commune to provide all the rest of the education needed. The contract arranging for this is called the "contract of adoption," and may be made for one or several schools. The adopted school undertakes to give free education to all children who have a legal right to it, the communes being responsible for the salaries of the teachers. Contracts of adoption are usually made for ten years (the maximum period allowed by law), and the adopted school must follow the same minimum curriculum as that imposed upon communal schools. Not less than half its teachers must be certificated, and the number of school hours per week must be at least twenty. It must also submit to Government inspection. Apart from these conditions, however, it is autonomous during the period for which the contract lasts. The commune cedes all right to appoint or dismiss teachers, to fix the curriculum, or in any way to influence the management.

Lay teachers in adopted schools must, if certificated, be paid the minimum salary laid down by the law for teachers in communal schools, but no minimum is fixed for those who are members of religious orders.¹ As these amount to two-thirds of the whole, the staffing in adopted schools costs much less than in those entirely under communal authority; but they receive exactly the same subsidies from the provinces and the State as do the communal schools.

¹ In 1905 there were 3872 teachers in adopted schools. Of these, 2500 were certificated, 1100 were laymen. The law regarding the payment of a minimum salary to lay teachers is sometimes evaded.

3. "ADOPTABLE" SCHOOLS

The third category, of "adoptable" schools, includes those which submit to precisely the same conditions as adopted schools, but have not been adopted by the communes, and receive no payment from them. But they have the same grant from the provinces and the State as the adopted and communal schools.¹

Of the 897,000 children attending elementary schools in Belgium² at the end of 1907, 57 per cent were in communal, 24 per cent in adopted, and 19 per cent in adoptable schools. This is to say that about 43 per cent of the children are in schools which are avowedly and definitely sectarian in character, and whose whole atmosphere is that of Roman Catholicism. In the communal schools the prevailing atmosphere varies from one which is directly hostile to Roman Catholicism, and indeed to formal religion of any kind (although, of course, no open attack upon it would be countenanced by the Government), to one which is as definitely Catholic as in the other two categories; since, as already stated, where the communal council is strongly Catholic, the education, although it may remain directly under the control of the council, is entirely Catholic in character. In 1907, 395 of the teachers in communal schools were members of religious orders.

The proportion of children in communal schools is declining. In 1900 it was 60·5 per cent, but by 1907, as already stated, it had dropped to 57 per cent. The causes for this are twofold. Primarily it is due to the influence of the Catholic Church, which adopts all kinds of methods to encourage the sectarian at the expense of the communal schools, unless the latter can be rendered practically Catholic.³ The earnest belief of the Catholics

¹ Of the 3558 teachers in "adoptable" schools at the end of 1905, 2502 were certificated and 2494 were members of religious orders. Nine-tenths of the lay teachers were certificated.

² Children in Infant Schools (*Écoles gardiennes*) are not included in this figure, nor those in the small number of schools receiving no State aid.

³ For a detailed statement regarding the pressure placed upon children

that it is their imperative duty to seek to control the whole education of the children is sufficient excuse, in their opinion, for their action in this direction. A second cause is the economy which the local tax-payers effect by having their children educated in the Church schools. Except in cases where the local councils are distinctly opposed to the Church control of education, the inducement is very strong to close communal schools and send the children to those under Catholic management.

In 1905 the total public expenditure on education of all kinds in Belgium was about £3,000,000,¹ or 8s. 10d. per head of the population. In England and Wales the expenditure per head on education in 1905 was 14s. 4d.—about half as much again. It is interesting to notice that, when we pass to public expenditure on elementary education, the difference between the two countries in this respect is yet more striking. The total amount of public money devoted to elementary education in Belgium (including Infant Schools) was £1,870,000 in 1905.² This works out at £1:13:1 per child, a much lower figure than in England and Wales, where the cost per child in 1905 was £3:7:2.

Owing to the methods adopted of keeping the Belgian educational accounts, it is impossible to say exactly what proportion of the cost of elementary education is met from public and private funds respectively, but it may be safely assumed that £1:13:1 per child represents a very large proportion, possibly three-fourths of the total cost.³

to attend Catholic schools in place of those under the control of the communes, see *Rapport sur l'enseignement primaire en Belgique*, H. Speyer, 1906. This pamphlet is avowedly controversial in character, but it gives the impression of a work founded upon careful observation, and its statistical statements have never been refuted by the Catholic party.

¹ The actual figure was £3,172,240, of which 42 per cent was spent by the State, 6 per cent by the provinces, and 52 per cent by the communes.

² The actual figure was £1,870,907, of which 40 per cent was contributed by the State, 5 per cent by the provinces, and 49 per cent by the communes, while 6 per cent came from other sources.

³ We have seen that 57 per cent of the children in communal schools are paid for entirely from public funds, and 24 per cent in adopted schools,

It will naturally be asked why the cost of elementary education per child in Belgium is so much lower than in Britain. The difference is due to various causes. Probably the principal ones are:—

1. The classes in Belgium are larger than in Britain. In Belgium each teacher has on the average forty-nine pupils, as compared with forty in Britain. If the pupils-teachers are included in calculating the British figure, the number of children per teacher is only thirty-five.¹

2. Owing to the extraordinarily low cost of building in Belgium, the schools themselves are often twice as cheap as similar buildings in Britain.

3. Apart from the fact that a large part of the teaching is undertaken by members of religious orders, whose remuneration is often only nominal, the salaries paid to all teachers are much lower in Belgium than in Britain. Head teachers of communal schools² in the largest towns (above 100,000 inhabitants) receive on the average about £190 per annum, which sum includes the estimated rental value of the residence provided. The teachers in this class only represent $2\frac{1}{2}$ per cent of the whole of the head teachers in communal schools. Nine-tenths of the latter are in communes with a population of less than 10,000, and receive on the average less than £80, including the rent of their residence.³ It will be admitted that these salaries are extraordinarily low, even compared with those paid

where by far the largest proportion of the cost is borne by the public funds. Only 19 per cent of the children are in adoptable schools, where the proportion of the cost of education borne by private funds is high.

¹ The number of pupils per teacher in Belgium sometimes rises to a very high figure. According to a report issued in 1900 by the Minister of Education, there are in the province of East Flanders forty-two classes with from 70 to 80 children per class, 21 with from 80 to 100, and 5 with more than 100. Apart from the fact that it is impossible for one teacher to give instruction of any real value to so many children at once, the classrooms in the rural districts are often overcrowded. A ministerial circular decrees a floor space of at least one square metre per scholar, but even this moderate allowance is not universal.

² Including "Directors" of Schools, who do no teaching.

³ 34 per cent receive on the average a salary of £85, and 55 per cent a salary of £70. Of the assistant teachers a larger proportion, of course, belongs to the most densely populated communes—22 per cent; these earn on the average £97. Forty per cent of them, however, are in towns of from

to teachers in Britain, which are inadequate enough in view of the difficulty and responsibility of the work. It is not surprising to learn that many teachers in Belgium are obliged to eke out their meagre salaries by undertaking the cultivation of a plot of land, secretarial work, accountancy, or some other employment.

The poverty of the remuneration is emphasised when it is remembered that all teachers in communal schools, and not less than half of those in other schools receiving State grants, must be certificated. To obtain a certificate it is necessary to spend four years in a training college, except in the case of those who have passed certain examinations after receiving a secondary education. The great majority of teachers in primary schools pass through the training colleges. Altogether there are 54 of these institutions in Belgium, of which 15 are under public control and 39 under that of the Church. All receive subsidies from the State, and give certificates which are recognised by the Government. According to the Liberals and Socialists, the standard of knowledge necessary to obtain a certificate is higher in the public training colleges than in those organised by the Church; and this fact has become so generally recognised that the public colleges have been obliged to lower their standard, as they found that pupils were forsaking their colleges and going to others where certificates could be more easily obtained. It is regrettable that for purely political reasons methods should be adopted which result in the lowering of the teaching standard.

Of course the quality of the teaching in the elementary schools varies greatly from commune to commune. In the small ones it is said to be frequently mechanical, and of a

1500 to 10,000 inhabitants, and earn on the average but £56, and 7 per cent are in the smallest communes, earning only £48 on the average.

The earnings of women teachers are lower still. Of the head teachers in communal schools, four-fifths belong to the lowest paid classes (37 per cent to communes of between 1500 and 10,000 inhabitants, and 43 per cent to those of 1500 inhabitants and less). Their salaries average £67 and £58 respectively. For assistant women teachers in the largest communes (above 100,000 inhabitants) the average salary amounts to £77. But the majority receive less than £64 (*Rapport triennal sur la situation de l'enseignement primaire en Belgique*, 1908, pp. 240-243).

character which fails to develop the thinking capacity of the children, but in the large towns there are many excellent schools with first-rate teaching. The writer has visited a number of these, and has been struck by the devotion and ability of the teachers. In such schools the ordinary routine is varied by school journeys, which may be for only half a day, or for three or four days. Where these are organised, much of the teaching during the term centres round the objects of interest to be seen in them. Fortunately the idea of school journeys is spreading considerably.

The vexed question of religious teaching in communal schools is usually solved by an arrangement with the clergy, whereby either the priest or the teacher gives half-an-hour's religious instruction per day, from which any child may be exempted at the written request of its parents. The teacher's part in this arrangement is strictly regulated by law. In teaching the catechism, for instance, he may do no more than make the children learn it by heart, all explanations or comments being forbidden. There is considerable danger lest mechanical memorising of this kind, once introduced into the schools, should extend to other subjects.

The Liberals and Socialists complain of the amount of time devoted to religious instruction in many schools. Certainly this is often great, especially for a year or so before the children are confirmed; and the character of the teaching sometimes arouses very bitter feelings among politicians in the opposite camp. As an illustration, the following extract from the catechism taught to school children in the Diocese of Namur may be cited:—

LESSON XXI (pp. 117-118)

Is not Liberalism also an enemy of the Church ?

Liberalism properly understood is also an enemy of the Church.

What do you understand by Liberalism ?

It is the doctrine of those who pretend that it is possible to govern without paying attention to the rights of the true Church.

Is this doctrine condemned ?

Yes, the Sovereign Pontiff has condemned it several times, and especially by his encyclical of April 1885.

Is the party which is called Liberal always opposed to the Church ?

No, in some countries the Liberal party is merely the party which demands a greater liberty for commerce, industry, etc. It is clear that in such cases it is not the enemy of the Church.

When is the Liberal party hostile to the Church?

When it refuses to recognise her rights and endeavours to persecute her.

Is this the case in our country?

If we examine what the Liberal Party has done in the past, and what it is endeavouring to do at the present time, we can say that, as it is found in Belgium, it is the enemy of the Catholic Church.

Then is it wrong to support it?

Yes, and those who vote for Liberal candidates knowing them to be unfavourably disposed towards religion, or assist in their election in preference to candidates favourable to Holy Church, do wrong. Their fault may be compared to that of a child who helps some one to injure his mother.

Is there not at the present time a still more terrible enemy?

Yes, Socialism.

What are the principles of Socialism?

The chief are—neither God, nor master, nor family, nor property, nor heaven, nor hell.

Can such error be maintained?

No, never.

Are the Socialists the true friends of the working-man?

No, they mislead him.

Pages 291-292

It is also a sin if one runs the risk unnecessarily of losing one's faith, especially in the following circumstances:—

1. By frequenting the schools condemned by the Church.
2. By making companions of those who are enemies of the Church.
3. By being a voluntary hearer of speeches directed against the priest and religion.
4. By reading or keeping in one's possession books containing religious errors.
5. By reading habitually and subscribing to newspapers and magazines hostile to the Church.
6. By becoming a member of Liberal or Free Mason Associations.

It is also a sin to refuse to take part, according to one's position and means, in the defence of religion. Or again, to endeavour to injure the Church, either by speaking and working against the priests, by supporting bad schools, endeavouring to get children to attend them or sending one's own children to them, by obtaining for one's neighbour bad books or newspapers, by persuading him to rebel against the authority of the priest, by giving any help to the party which is the enemy to religion, by voting for its candidate,—or in any other way.

While Liberals and Socialists naturally protest against teaching such as this, the Catholics complain that in communal schools under the control of Liberal councils the teaching given in history, science, and other subjects, is of such a character as to counteract the effect of the half hour's religious instruction made compulsory by law.

INFANT SCHOOLS

The description of elementary education in Belgium would be incomplete without reference to the large number of *écoles gardiennes*. These do not exactly correspond to anything in Britain, being half-way between a kindergarten and an infant school. They are almost always held in buildings separate from those of the ordinary primary schools, and are intended for children up to the age of six years. Besides the usual kindergarten subjects, instruction is given in reading, writing, and very elementary arithmetic. Altogether there are nearly three thousand of these schools. More than half of the teachers are members of religious orders.¹ The great increase in the number of *écoles gardiennes* during recent years is primarily due to religious rather than to educational forces. The Church recognises the importance of gaining an influence over the children early in life, and sees in these schools an excellent opportunity for doing so. It has, therefore, given itself to this work with great vigour, and the writer can testify from his own observation to the devotion of the nuns who teach in these schools for salaries which are often merely nominal.

Another potent factor in the success of the infant schools is the desire of very many parents that their children should secure the minimum amount of knowledge

¹ Of the 4563 teachers, more than half (2637) are members of religious orders, indeed, in the "adopted" and "adoptable" schools the proportion rises to 90 and 86 per cent respectively. All the salaries are very low. For head teachers in the communal kindergarten schools the average is £45 per annum, but more than half of them work for £33 or less, although nearly three-fourths (72·77 per cent) of them are certificated kindergarten teachers.

demanded by public opinion in good time, and be set free for the serious business of life. Thus, the School Inspector for Marche, in his report for the year 1902,¹ speaks of "the wish of parents to have children taught to read and write fluently at the infant schools, that the obligation of sending them to elementary schools may be dispensed with as soon as possible."

The infant schools, like the ordinary primary schools, come under three categories, namely, communal, adopted, and adoptable, and may receive similar grants from public funds.²

CONTINUATION SCHOOLS

To complete our survey of Belgian elementary education, the continuation schools must be briefly described. In a country like Belgium, where there are practically no facilities enabling poor children to pass from primary to secondary schools, and on to the universities, continuation schools are especially necessary, and the need for them is, on the whole, fairly well met. In 1905 there were 4077 such schools in Belgium, attended, according to official returns, by 201,061 pupils.³

The character of these schools is widely different from that of, say, the German continuation schools, for to a large extent they really exist to give the rudiments of education to those who have not received them in the ordinary elementary schools. An effort is, however, also made to specialise in the direction of the work on which

¹ *Rapport triennal sur la situation de l'instruction primaire, 1900-1902*, p. cxiii.

² In 1905, 899 were communal schools, 537 were "adopted," and 1335, or almost half of the total number, were "adoptable." The number of infant schools is rapidly increasing. In 1905 there were eighty-six more communal, and 375 more "adopted" and "adoptable" than in 1900. The public expenditure upon the schools amounted in 1906 to £160,000.

³ Of the 4077 schools, 2079 are communal and 1998 are either "adopted" or "adoptable" schools. Of the communal schools 286 and of the other schools 1190 are for girls. Of the total number of scholars 114,908 were boys, and 86,116 girls. Too much confidence must not, however, be placed in the attendance figures, for as the schools are in almost all cases free, it is said that a considerable number of the children registered practically never attend.

the pupils will be engaged in after life. Thus domestic economy is largely taught to the girls, and matters connected with agriculture and industry to the boys.

A sum of about £118,000 was contributed from public funds in 1906 towards the cost of these schools. The cost of the communal schools is entirely met from public sources, but in the other categories, part of it is met privately, as in the case of the elementary and infant schools.

Only one other class of schools need be referred to, namely, those which are definitely technical in character. Technical instruction is well organised in most of the industrial parts of Belgium. Altogether, according to official returns, about seventeen thousand girls and young women, and forty thousand boys and young men are receiving technical instruction.¹ The teaching system covers a wide range, from commercial colleges with a three years' course, to simple courses of lectures on domestic economy. The latter are very popular, and are attended by nearly ten thousand girls each year. About 22,000 boys and 1000 girls attend those technical schools in which the theory of the different industries is taught, and 9700 pupils attend schools where practical instruction in different trades is given. Unfortunately, however, the level of education of the children and young persons attending is so low, that it is only possible to give them technical instruction of a simple elementary character. In addition to these definitely educational institutions there are a number of workshops for training apprentices (*ateliers d'apprentissage*). The instruction given is often narrowly specialised, and only fits the young workman to fulfil a single function in the workshop. It is stated that sometimes these are little more than ordinary workshops, in which the giving of education is made an excuse for obtaining cheap labour. When investigating technical instruction

¹ Those attending classes on more than one subject are entered separately for each subject; and so the actual number of *different persons* receiving instruction is less than would appear from the official figures.

in East Flanders, a school was visited which so strikingly illustrates the dangers arising in a country without any system of compulsory education that a reference to it is worth while. The school was held in a small house situated in a narrow lane, apparently without court or garden. The owner and manageress was a dirty old woman who, in a small back kitchen, was chattering—this during school hours—to three or four of her neighbours. She was surrounded by eight or ten children of the poorest class, and the room, the children, and the women had a neglected appearance. The old woman, unable to understand French, called in the teacher, a neatly dressed girl of sixteen or seventeen, who explained that the merchants to whom they sold their laces had strictly forbidden them to show either school or handiwork. About twenty-five little girls were present, all of them under thirteen, and averaging from eight to ten years of age. They attended no other school, and—to judge from the information given—were only instructed in lace bobbin work, for which they received a small payment from the woman who sold it. Similar “schools” are to be found in other communes in West Flanders, and the Government, even if it knew of their existence, would be unable, under existing enactments, to close or improve them.

It is not proposed in this volume to describe the secondary education in Belgium, which culminates in four universities of high standing, but before closing the chapter we may briefly summarise the facts stated, and draw conclusions from them.

Education in Belgium suffers severely from being made a party question. It is doubtful whether in any country it has aroused more bitter feeling between religious and political bodies, and it has been proportionately handicapped. Although a good beginning is made by an extensive system of kindergartens, the education of the older children cannot be looked upon as satisfactory. As it is not compulsory, a large proportion of them, probably 10 per cent or more, never go to school at all, and of those who do, many attend

very irregularly, while the great majority leave school when they are twelve years old, if not before. It is this irregularity of attendance, rather than the character of the teaching, which accounts for the high proportion of illiterate persons in Belgium, probably not less than 20 per cent of the total population over eight years of age. Of course the proportion is highest among the old people, but it is very serious even among the young.

Upon the whole, therefore, it must be said that the standard of primary education in Belgium is a low one, a fact which cannot fail to diminish the wage-earning capacity of the workers.

CHAPTER XXI

MEANS OF TRANSPORT

I.—RAILWAYS

THE industrial and agricultural prosperity of a country—indeed, its whole social economy—is vitally affected by its facilities for transport. A country well served with railways, canals, and roads is likely to develop its resources much more swiftly than one comparatively poor in them; and the provision of cheap and rapid means of passenger transit not only makes labour more mobile, but has an important bearing on housing and rural exodus. It is therefore important to study the question of transport facilities in Belgium, and see how far the social condition of her people, and the development of her agriculture and industry, are affected by them.

There is no country in the world with so great a length of railway in proportion to its size as Belgium, with her 2859 miles, or 30·29 for every 100 square miles of country.¹ Next comes Great Britain, with 22·38 per 100 square miles; then Germany, with 15·72; and France, with 11·72. But in addition to her main lines, Belgium has a truly wonderful system of light railways, which play so important a part that they will be described in detail later in this chapter.

With the exception of 215 miles still in private hands, all the main railways of Belgium are national property, managed directly by the State, and it is probable that in

¹ This refers to the year 1907.

time the remainder will be nationalised. Of course, there are a certain number of people who complain of the State management of the railways, but the general opinion is in favour of it.

The fares for passenger traffic are low—just under $1\frac{1}{2}$ d. per mile first class, about one penny second class, and a half-penny third class. The second-class carriages are on a level, from the point of view of comfort, with the best third-class carriages in Britain, or possibly a little better. The third-class carriages have wooden seats and small windows. Much use is made of season tickets, which are exceedingly cheap. A ticket for a fortnight, available on all lines in Belgium, including those in private hands, costs £2 : 9 : 2 first class, £1 : 12s. second class, and 18s. 10d. third class, while one available for five days costs £1 : 4 : 7, 16s. 5d., or 9s. 5d. in the respective classes.

Although it is notoriously difficult to state clearly and briefly the charges made in any country for the transport of goods, we must endeavour to do this for Belgium, since the question so vitally affects the interests of both agriculture and industry that it cannot be neglected. An attempt will also be made to compare Belgian with English rates.

It is said that there are about three million different rates charged on the English railways. Each railway has its own, and these vary considerably over different sections of it, and sometimes even in one and the same section, according to the direction in which the goods are sent. For instance, there are cases in which it costs more to send goods from station "A" to station "B" than from "B" to "A." Thus, to make an absolutely full and complete comparison between the goods' rates in Belgium and in England is impossible, and we can aim only at a rough general statement.

The English rates quoted in this chapter are those of one of the largest companies, and are not higher, indeed on the whole they are probably lower, than the average charged by other English lines. The charges in Belgium

are uniform throughout the whole system, except that under certain circumstances goods consigned in large quantities for export are conveyed at a lower rate. In comparing the two countries upon this basis, the following facts emerge. For parcels up to 14 lbs. there is little difference in the charges, and this holds good of heavier parcels, say up to 28 lbs., when these are sent short distances only; but after the 14 lb. limit is passed, the Belgian can send small parcels much more cheaply for a long distance than is possible in England. Thus, a Belgian farmer or market gardener can send 44 lbs. (20 kg.) of vegetables 94 miles (150 km.) at company's risk for sevenpence. This would cost the Englishman 2s. 1d. if sent at company's risk, and 1s. 5d. if sent at his own risk.¹

The table on p. 587 in the Appendix shows the comparative cost of transport for 1 cwt. of various goods in Belgium and in England. The charges for express goods train in Belgium may be compared with those for passenger train in England, though the delivery will probably be somewhat more rapid in the latter case. It will be noted that for short distances, say up to $12\frac{1}{2}$ miles, the rates in the two countries are practically the same, unless the Belgian pre-pays the cost of carriage, in which case he gets a reduction of about 16 per cent. But for long distances, say 94 miles, the charges in England are from two to three times as high as in Belgium. Even if the English charges per goods train be compared with the Belgian charges per express goods train, they are generally considerably higher.²

¹ In the Appendix, pp. 585-590, will be found various tables giving further details of the rates charged in Belgium and England for agricultural produce. For the sake of simplicity only rates upon agricultural produce are considered. Investigations made by the writer, however, indicate that the relation found to exist between the rates on agricultural produce in the two countries applies more or less to industrial goods.

² The writer is aware that when traffic is passing regularly and in considerable quantities over the English lines, the railway companies arrange special rates somewhat lower than those which they publish. But these apply principally to traders, and others who consign large quantities of goods, and not to those who only send goods irregularly or in small quantities. Therefore, even if it were possible to obtain particulars of these special and privately arranged rates, they could hardly be compared with the rates in Belgium, which are charged to every one alike.

If we take the charges for 1 ton lots, and compare the Belgian and English rates per goods train, the latter, again, are much higher, whether for short or long distances. In many cases the English charge is from two to three times as high as the Belgian, and it is the same with charges for full truck loads (5 tons). In the case of cattle, the difference is not nearly so great, the charges in most cases being pretty equal in the two countries. On the other hand, the Belgian who sends milk to a dairy has a decided advantage over the Englishman. In order to help the small holder, the Government has arranged a series of extraordinarily low rates for the conveyance of milk (see Appendix, p. 590) addressed to a dairy. A can of milk weighing 22 lbs. can be sent 31 miles for a penny, and $93\frac{1}{2}$ miles for twopence; and other rates are proportionately low. The minimum charge on the English railway is sixpence, for which amount 104 lbs. can be sent $18\frac{3}{4}$ miles. To send 22 lbs. for 31 miles would, however, cost ninepence, and to send it $93\frac{1}{2}$ miles a shilling. On the other hand, these rates include the free returns of empties, which is not the case in Belgium. If the milk is not sent to a dairy, the Belgian rates for ordinary goods apply (see Appendix, p. 588).

Thus we see that although it is true that the English passenger service is somewhat more expeditious than the Belgian express goods service, the rates charged are so much higher as to counterbalance this advantage. This is an important fact which must not be forgotten when discussing the relative prosperity and development of agriculture in the two countries. Cheap transport is essential to the farmer.¹

Certain writers complain of the bad management of railways in Belgium. Mr. E. A. Pratt, for instance, in his book, *State Railways*, condemns it very strongly. To

¹ The remarks which have been made above regarding the railway rates in Belgium refer to those charged upon the main railways. In the tables given in the Appendix, however, there is a column showing the rates upon the light railways. It will be noted that they are often much lower than those on the main railways.

some extent he is justified, but what railway system is there with whose management fault could not be found? The present writer's opinion, after travelling widely over the Belgian railways at different times of the year, and making careful enquiry into the facilities offered for the transport of goods, is that while, of course, details might be much improved, the system generally is not open to the severe condemnation of such critics as Mr. Pratt. Without entering into details, it may be said that the chief criticisms of it which can be justified are that the management is too bureaucratic; that the railways are not run on strictly business lines; and that too little authority is given to those who are directly responsible for the detailed management.

There is no need to enter in detail into the finances of the Belgian railway system, but a few of the most important figures may be given. According to official statistics, the capital invested in national railways, at the end of 1905, amounted to £91,012,771; and since the establishment of the railways in 1836 a total profit of £1,440,000 has been earned.

It is, however, important to note how this figure is arrived at. Each year the railway accounts are virtually closed; and if there has been a loss on the year's working, the State pays it off, if a profit, the State takes it. No interest is charged against the railways on account of payments made by the State to wipe off losses, nor allowed on account of profits paid into the National Exchequer by the railways.

The total profit referred to above consists of the sum total of the profits after allowing for the payment of interest on capital, minus the sum total of the losses. Had the railway finances been conducted like those of an ordinary business enterprise, fresh capital would have been introduced to make up for the losses; while, if the profits had been kept as a reserve fund, interest would have been earned upon them. This method of book-keeping would have shown a net loss on the working of the Belgian

railways of £2,840,000. The turnover from profit to loss is considerable, because the losses were chiefly incurred in the early years, and so compound interest upon them amounts to a large figure. Looked at from the business standpoint, however, it seems clear that there has been this actual loss on the railways.

Another point must be mentioned in connection with railway finances, namely, that although excellent regulations have been laid down, defining the forms of expenditure to be charged to the revenue and capital accounts respectively, these are not adhered to in practice. Much expenditure is charged to the capital account which in a prudently managed business would be paid out of revenue. If the official rules in this matter had been strictly enforced, there is no doubt that on many occasions instead of recording a profit the railways would have recorded a loss. Facts have been brought to the writer's notice, in the course of a detailed examination of the subject, which would illustrate this statement; but perhaps enough has been said to show that the official figures are based upon a system of book-keeping which it would be difficult to justify, from the standpoint of an ordinary business man. There is the less need to go more deeply into these financial matters, which at the best are complicated and difficult to state simply, because, from the social point of view, it is not of vital importance whether there has been a small margin of profit or of loss on the national railway enterprise. Even if it be proved that the past seventy-three years' working has resulted in a loss, the policy of the State might be justified by the facilities it has offered. It would, of course, be much more satisfactory in every respect if the accounts were so kept as to show accurately the financial position of the undertaking.

CHEAP WORKMEN'S TICKETS

We now turn to a matter connected with the Belgian railways which deeply affects the social and economic life of the nation, and must therefore be considered in some detail.

Since 1872 the Belgian Government has offered railway facilities to workmen far in advance of those provided in any other country. The rates charged are extremely low, especially for long distances.^v Thus, a ticket enabling a workman to travel three miles (5 km.) to and fro for six days costs ninepence, or about a farthing per mile. If the distance to be travelled each way daily is $6\frac{1}{4}$ miles (10 km.), the ticket costs one shilling, or $\frac{1}{6}$ d. per mile. For $12\frac{1}{2}$ miles (20 km.) each way it costs 1s. $2\frac{1}{2}$ d. a week, or $\frac{1}{10}$ d. per mile. For 25 miles (40 km.) each way it costs 1s. 7d., or $\frac{1}{5}$ d. per mile; and to travel 62 miles (100 km.) each way daily, which is the maximum distance for which workmen's tickets are issued, costs 2s. 6d. per week, or $\frac{1}{25}$ d. per mile. Other special tickets, available for one double journey each week, are issued, which are almost exclusively used for the longer distances. The price of these also is extraordinarily low. Thus, for a double journey of 25 miles (40 km.) each way the cost is $9\frac{1}{2}$ d., or $\frac{1}{5}$ d. per mile. For 62 miles (100 km.) each way it is 1s. 3d., or about $\frac{1}{8}$ d. per mile; and for 124 miles (200 km.) each way it is 2s., or $\frac{1}{11}$ d. per mile.

If we contrast these figures with the ordinary third-class fares, which are themselves very low, we see how great is the reduction made in favour of working men. An ordinary third-class return ticket for a distance of 25 miles (40 km.) costs two shillings, whereas a workman's ticket, enabling him to make the double journey of 25 miles (40 km.) six times in the week, only costs 1s. 7d., actually less than the ordinary fare for one double journey. As might be expected, the exceptional cheapness of workmen's fares has resulted in their wide adoption.¹

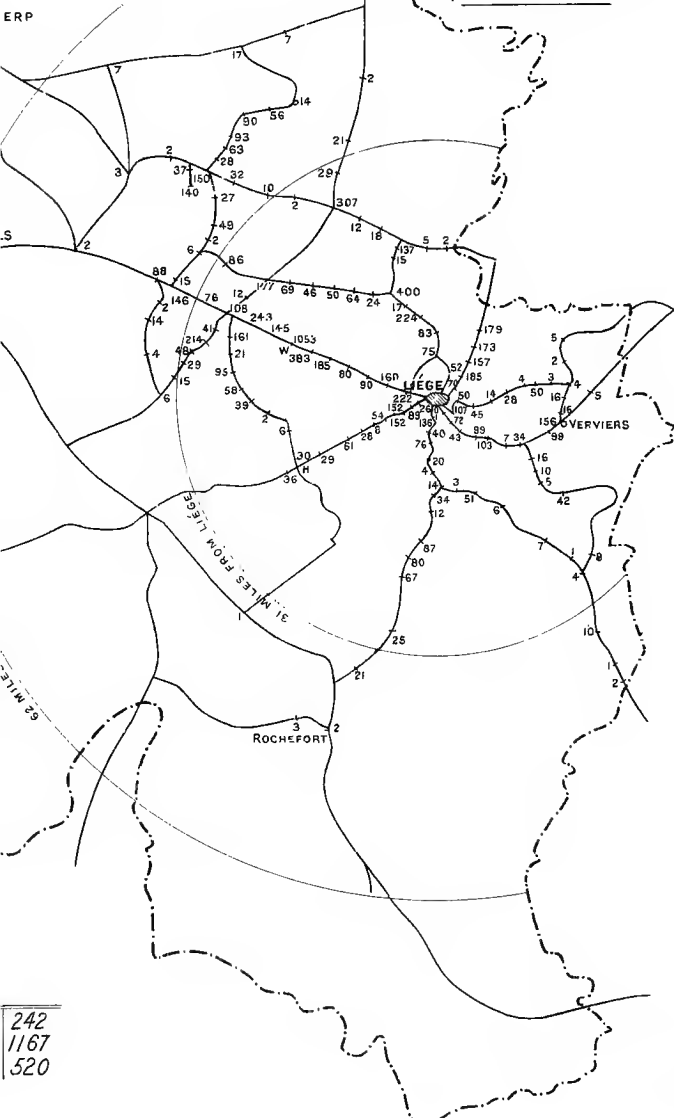
¹ For comparison some of the fares at which workmen's tickets are issued by a large English railway company may be cited:—

Miles.	WEEKLY FARE FOR TWO JOURNEYS DAILY		England.		Belgium.	
	s.	d.	s.	d.	s.	d.
4	.	.	1	3	0	10
8	.	.	2	0	1	0
16	.	.	2	9	1	3

For one weekly double journey, only ordinary week-end facilities are available in England, *i.e.* return journey for single fare, but these are only available between certain towns.

CHEAP WORKMEN'S TICKETS IN BELGIUM.

TO ILLUSTRATE
THE AREA OF THE LABOUR MARKET
OF LIÉGE
(June 1st to 15th 1906)



242
1167
520

by permission of
Professor Mahaim
of Liège

More recent is the information which Professor Mahaim has kindly collected for the purposes of this volume as to the number of workmen who make use of cheap tickets to come in and out of Liège. Making his enquiry between the 1st and 15th of June 1906, he found that 5830 workmen came into Liège every day, and 4095 more came in each Monday morning, and spent the week there, returning to their homes for the Sunday. Thus, altogether, nearly 10,000 workmen came into Liège and the immediate district each week from a distance. From the map prepared by Professor Mahaim, which is given opposite, it will be seen that while the majority of these live within a 15½ miles radius, a large number live at distances varying between 15½ and 31 miles, and 12½ per cent of the whole more than 31 miles from their work. Enquiry made by him in other parts of the country showed that in the case of some factories more than half the workmen live outside the town in which the works are situated. Thus in Couillet iron-works, near Charleroi, out of 2339 men engaged in the blast furnaces and rolling mills, only 47 per cent inhabit the immediate neighbourhood, the remainder coming from a distance. In the John Cockerill iron-works at Seraing, near Liège, about half of the 9000 people employed live at a distance.

It has been stated that probably at least 125,000 individual workmen, or approximately one-sixth of the working-class population, use these cheap tickets to go to and from their work. Obviously such a fact must vitally affect the social and economic life of Belgium; indeed, it may be said to have become an integral part of it. Let us examine the consequences.

The first result to be noted is that cheap tickets tend to equalise the rate of wages in town and country. There is no doubt whatever that the marked rise in the wages of agricultural labour during the last twenty years¹ has been aided in no small measure by these facilities for going to the towns to work. In order to retain labour in the country

¹ Wages have doubled between 1846 and 1895.

it has been necessary to raise wages. Farmers often complain bitterly of their inability to get men; but when it is remembered that the average wages of an agricultural labourer over the greater part of Belgium do not even yet exceed two francs (1s. 8d.) for a long day's work, and that the work is often irregular, the scarcity of labourers is not surprising. The farmers, however, say they cannot afford to pay more than they do, and in some districts they are giving up their land because of the lack of cheap labour. As soon as they do this, the land is cut up into small holdings, which readily find tenants, and thus indirectly the cheap workmen's tickets bring about a greater subdivision of the soil.¹ Probably in the towns the *immediate* effect of them has been either to decrease wages or to check the rate of increase, but the ready supply of labour from the country districts has quickened industrial development, and this tends to absorb the labour provided. Whether the flow of labour into the towns or the development of industries has proceeded more rapidly, it is hardly possible to say; but there can be little doubt that, taking labour as a whole (*i.e.* agricultural and industrial together), the transit facilities have tended in the direction of higher remuneration. It must be remembered that the *total* supply of labour has not been increased, but it has been rendered more mobile, and therefore more effective.

Cheap tickets also keep down the rents of working-class houses in the towns. They do this primarily by enabling labourers who forsake agriculture for industry to go on living in the country, and thus the demand for workmen's dwellings in towns is held in check. Again, cheap tickets are really a kind of safety-valve, since, should town rents rise above a certain point, the workmen can easily move out into the country and come to and from their work. The legislation described in Chapter XXVIII., which facilitates the building of houses by working men, helps on

¹ It is said that very occasionally the scarcity of labourers has had the opposite effect, and several farms of medium size have been united into a large one, where agricultural machines could be profitably employed; but such instances are rare.

this movement by enabling them to borrow the necessary capital on easy terms. Thus the cheap tickets aid in securing a wider distribution of the increment of site values, due to the growth of population. It may also be noted that they largely remove one of the objections urged against working men becoming house-owners. It is rightly stated that, as a rule, a workman who has bought his house is less mobile than one who is merely a tenant; he cannot so easily move away in search of work or higher wages. Cheap tickets, however, enable a house-owner to work in a district of high wages, although he may continue to live where they are low.

There are many advantages in a system which enables a working man to reside in the country while working in the town. The life is healthier for his wife and children. He gets a larger house, probably for less rent, and he has the advantage of a plot of land where, besides growing vegetables, he can keep a pig, a goat, and a few hens. His children, too, are brought up amid the sights and sounds of the country, and not entirely estranged from it like so many town dwellers in England. Their early years serve to keep alive that natural instinct for agriculture which marks the Belgian people, and many a young man who begins life as an industrial workman ends it as a small holder. Upon the whole, the influence of the cheap workmen's tickets has been to check the rural exodus.

The bearing of cheap tickets on the unemployed problem is referred to in Chapter XXXI., where it is shown how many industrial workers, in times of unemployment, work on their plots of land in the country instead of walking the streets.

Another important consequence of the great extension of travelling among working men is the increased interchange of ideas between the town and country districts, which is healthy for both.

While there is no doubt that the cheap workmen's tickets in Belgium are an advantage not only to the working classes, but to the nation as a whole, the facilities

they create for travelling great distances daily often result in undue physical strain. It is not uncommon for a man to travel an hour or more every morning to his work, and back again at night. Add to this the time occupied in walking between his house and the station, and again between the station and the factory, both in the morning and at night; remember that work begins early and finishes late, and that the weekly half-holiday which is almost universal in English factories, is all but unknown in Belgium—and it is obvious that there is practically no home life except on Sunday, and that the physical strain upon the worker is extravagant. The writer has been impressed with this fact in watching the workmen's trains, early in the morning or late at night, especially in the winter-time. If the hours worked in Belgian factories were not so long, this evil would be less acute; but, as it is, the excessive strain upon the physique of men who travel so far each day becomes a serious matter. It is to be sincerely hoped that the Belgian manufacturers may learn what the English are beginning to realise, that, judged merely from the financial standpoint, nothing is gained by working long hours, since shorter hours with a more vigorous and efficient staff pay just as well.

II. LIGHT RAILWAYS

We now pass to the subject of light railways.¹ While England has been endeavouring vainly to develop this means of transit, Belgium has actually covered her surface with a system of light railways more complete than that of any other country in the world (see Diagram, p. 302). It may safely be said that without it the success which she has achieved in agriculture would have been impossible; and we may add that under modern conditions no European country will fully develop the resources of the soil, unless

¹ By "light railways" is here meant local lines of no great length and with narrow gauge (usually 39½ inches). The lines and the rolling stock are much lighter than on the main lines.

it can provide an adequate supply of light railways for its local transit.

The subject is one of such importance, and the lessons Belgium has to teach are so interesting and instructive, that it will be worth while to consider them in some detail.

Prior to 1881, the creation of light railways, although desired and encouraged by the Government, was left to private initiative, with the result that nothing was done. But in that year a Commission was appointed to "study the best means of creating a system of secondary or local railways," and the creation of the light railway system of Belgium dates from the appointment of this Commission. At its second sitting, two of its members, MM. Bischoffsheim and Wollens, submitted a document which set forth in detail proposals for the institution of a National Society of Local Railways. These proposals, slightly amended by the Commission, formed the basis of the legislation of 1884 and 1885, and were the starting-point of the extraordinary development of the light railway system.

Acting upon the suggestions of the Commission, the State has granted the sole right to construct and control light railways to a society known as the National Society for Local Railways, whose administration is entrusted to a Council of four members, two appointed by the King, and two elected by the general body of shareholders in the different lines.¹ The King also appoints the chairman of the Council and the general manager. The interests of the shareholders are further safeguarded by a supervising committee of nine members, one from each province, elected by the shareholders.

No light railway in Belgium may be constructed except through the instrumentality of the National Society.² If the inhabitants in a rural district desire to have one, their communal council communicates this desire to the National

¹ As will be explained later, each line belongs to a separate limited company. The shareholders of all the different lines unite to appoint two persons to represent them on the National Council.

² Unless the National Society fails to take action within a year after receiving a request for the construction of a light railway.

Society and undertakes to meet the expenses of a preliminary enquiry.¹ The Society then ascertains the density of the population and the probable amount of traffic, and sends down engineers who roughly survey the ground. The report of this enquiry, which is not at all costly, is submitted to the Government. The Minister of War examines the proposal from the point of view of national defence, and the Minister for Railways with reference to any possible competition with the State main railway system. If the Government expresses its provisional approval of the rough proposals which have been submitted, the next step is for the National Society to raise the necessary capital. In England this provision of capital has hitherto been one of the chief stumbling-blocks in the way of any considerable development of the light railway system.

It will be interesting, therefore, to see how Belgium finances her light railways. First the National Society ascertains how much capital will be necessary in connection with any proposed line; then a limited liability company is formed for its construction and equipment. The State promises—subject to its approval of the detailed plans to be submitted at a later stage—to take half the shares. Some of the provinces subscribe one-quarter, and some one-third, of the capital required for the construction of lines within their boundaries.² Thus we see that from three-quarters to five-sixths of the total capital is furnished by the State and Provincial Governments. The remainder of the shares are taken up by the Communes through which the light railway passes, or by private individuals; but, as a matter of fact, the latter have only subscribed $1\frac{1}{2}$ per cent of the total share capital invested in light railways in Belgium. As the development of the system is proceeding very rapidly, the immediate provision of the large amount of capital

¹ It is interesting to note that up to the end of 1908, applications for the building of 3859 miles of lines had been acceded to, and only 240 miles refused.

² The State and Provinces now subscribe a larger portion of the total cost than they did in the early days of the National Society.

required might sometimes prove burdensome to the public authorities, especially to the smaller Communes whose financial resources are not great. Therefore, the custom invariably followed has been for the State, the Provinces, and the Communes to pay for their shares by annual instalments, instead of in a lump sum. They spread the payment over a period of ninety years, paying each year to the National Society, which issues the shares, $3\frac{1}{2}$ per cent upon their value. This sum covers interest and sinking fund, so that at the end of ninety years the shares become the absolute property of the State, Provinces, and Communes respectively. But of what service to the National Society, it may be asked, is an arrangement such as this, which does not appear to give that immediate command of capital which is the object of issuing shares? The answer is that the State guarantees not only a dividend of $3\frac{1}{2}$ per cent upon all the share capital subscribed by the three public authorities, but the security of the principal. Furnished with this guarantee, the National Society has no difficulty in issuing 3 per cent debentures, which are redeemed as the sinking fund accumulates, and it is in this way that the whole of the capital for the light railway system of Belgium has been raised.¹ The company, under this arrangement, obtains the needed capital on terms as low as those on which the State can borrow, while the latter is not burdened by any addition to its debt, or by the heavy responsibilities which would result from complete nationalisation. It will be remarked at once how very lightly the burden of such an arrangement rests upon public bodies. All they have

¹ The price at which these debentures can be issued varies according to the state of the money market; but in order to maintain stability, the National Society has built up a reserve fund from profits realised on the issue of debentures above par, out of which losses due to the issue of any debentures below par are met. As a consequence of this policy, the shareholders have not in any instance been called on to guarantee more than 3·5 per cent to cover interest and sinking fund on account of the purchase of their shares. At the time of writing (1909), a guarantee of 3·65 per cent is provisionally demanded for new lines, but with the understanding that if the condition of the money market becomes more favourable before the capital is actually required, the annual charge on the shares to cover interest and sinking fund will be reduced to 3·5 per cent.

to do in any year is to pay or to receive the difference between the percentage earned upon the capital, and the $3\frac{1}{2}$ per cent which they have to pay annually for ninety years to the National Society. If the capital invested in any railway steadily earns more than $3\frac{1}{2}$ per cent, the public bodies actually receive cash each year, although at the same time they are buying their shares.¹ It should be noted in passing that the National Society is exempted from all state and provincial royalties upon the concessions granted, and from all national, provincial and communal taxes and rates on property directly utilised for the railways; and enjoys the privilege of free postage for official correspondence.² In return for these privileges and for the financial guarantees referred to above, the National Society undertakes to perform certain services for the State, such as the free carriage of mails, and the carriage of soldiers and voters at half-fares. As soon as the arrangements for the provision of capital have been made, it prepares detailed plans for the construction of the line and draws up the necessary specifications, and after these have received the approval of the Government, the work of construction begins. This is always let on contract, but is supervised by the National Society's own officers.

¹ Any profits earned in excess of $3\frac{1}{2}$ per cent, after the payment of certain bonuses to the members of the administrative council and the general manager, are distributed as follows:—One-quarter towards the constitution of a reserve fund for the particular line earning the dividend; three-eighths in additional dividends to the shareholders; three-eighths for the constitution of a national reserve fund, to assist lines which are 'not prospering.' It is only through this national fund that the different lines are in any way financially connected with one another: in everything else the accounts are kept rigidly separate. (These reserve funds are, of course, quite distinct from that mentioned in footnote, p. 297.)

² The only exemption, other than special facilities for obtaining an advance from the Treasury, granted to the constructors of light railways in Great Britain by the Light Railways Act of 1896, consists in the provision that: "Where the Treasury agree to make any such special advance as a free grant, the order authorising the railway may make provision as regards any parish that, during a period not exceeding ten years to be fixed by the order, so much of the railway as is in that parish shall not be assessed to any local rate at a higher value than that at which the land occupied by the railway would have been assessed if it had remained in the condition in which it was immediately before it was acquired for the purpose of the railway. . . ."

The methods employed for the working of the line are interesting and suggestive. The National Society never works its own railways, but as soon as one is ready, with all necessary stations and rolling stock, tenders are obtained from industrial companies for its working. The usual arrangement made is for the company to which the working of the lines is farmed out, to undertake to hand over to the National Society an agreed percentage of its gross receipts, usually from 30 to 40 per cent. The National Society provides the whole of the rolling stock, the contracting company being responsible for all repairs and replacements. Usually the agreements are entered into for thirty years, with the right of cancellation at the end of fifteen.¹ It frequently happens that one company contracts with the National Society to work several separate railways. At the end of 1906, 138 different light railways in Belgium were worked by thirty-seven companies, some of which were working as many as eleven separate lines. The accounts of each line are kept entirely distinct by the National Society.

The wisdom of farming out the working of the lines is much debated by railway experts in many countries, but whatever may have been the experience elsewhere, there is no doubt that this policy has worked well in Belgium. The greatest care must, of course, be taken only to farm out the working of lines to companies of financial stability and of thoroughly good reputation. An interesting development, much favoured by the National Society at the present time,

¹ Among the items stipulated in the agreements, the following may be noted. The contractors have to deposit an appropriate sum to guarantee their ability to effect renewals and repairs of lines and stock when they become necessary. Additions to the rolling stock are usually supplied by the National Society (of course at the expense of the shareholders in the line concerned). The contractors are obliged to insure all buildings and material against the risk of fire. The minimum number of trains to be run per day is fixed, and also the maximum fares and rates which may be charged. The fares and rates are subject to the approval of the Government with a view to prevent the undercutting of those on the national railways. The stations and stopping places and the junctions of private lines and sidings are also fixed by the National Society. At the end of 1908 the number of private junctions was 372.

is the farming out of the working of lines to industrial companies, in which the Communes through which the lines run are the principal, if not the only shareholders. This experiment is giving satisfactory results in the thirteen cases where it has been tried.

The organisation of the Belgian light railway system has been described in some detail because its effects have been so far-reaching, and because it has met with such extraordinary success. As we have seen, it combines many advantages. The State retains absolute control over the construction of the railways. The share capital is subscribed by public authorities and the railways are their property, but the arrangements are such that the financial burden upon the public is comparatively insignificant. Through the medium of the National Society the best expert advice and the result of years of extensive experience are at the disposal of the most remote village which may desire to have a light railway. Disastrous mistakes due to ignorance are thus avoided, and each railway is constructed on the most economical lines. But with all these advantages, there are none of the disadvantages arising from excessive centralisation; for owing to the manner in which the capital is subscribed, each locality has a direct interest in making its particular line a success; and owing to the method adopted of farming out the working of the railways to industrial companies which control only a comparatively small length of line, that personal attention to detail is obtained which is impossible in huge organisations. A system so carefully devised deserves to succeed, and there can be no doubt that the light railways of Belgium have succeeded beyond the highest expectations of those responsible for the legislation from which they sprang.

In 1885, when the present legislation was enacted, there were practically no light railways in Belgium; the sole product of the legislation of 1875 being one line of 6 miles. At the end of 1908, there were 160 lines running or under construction, having a total length of 2586 miles, equal to 22·8 miles for every 100 square miles of the national area.

In addition, arrangements were in progress for the laying down of 149 other lines with a total length of 1272 miles. When these are completed, Belgium will have 3859 miles of line, or 33·7 miles for every 100 square miles of her total area. The contrast between these figures and those of other European countries is most striking, especially when it is remembered that Belgium has, in addition to her light railways, a more complete system of ordinary railways than any other country in the world.¹ We find, for instance, that in proportion to her total area she has fourteen times as many miles of light railway as France, nine times as many as Germany, and no less than thirty-eight and a half times as many as Great Britain.² Ever since the legislation of 1884–1885 was enacted, their development has been steady and rapid; and even now, when it might be supposed that finality had almost been reached, applications for new railways are constantly being received by the National Society.³

If we turn to the financial result of the working of the light railways, we obtain some interesting figures. According to the report of the National Society, the capital subscribed

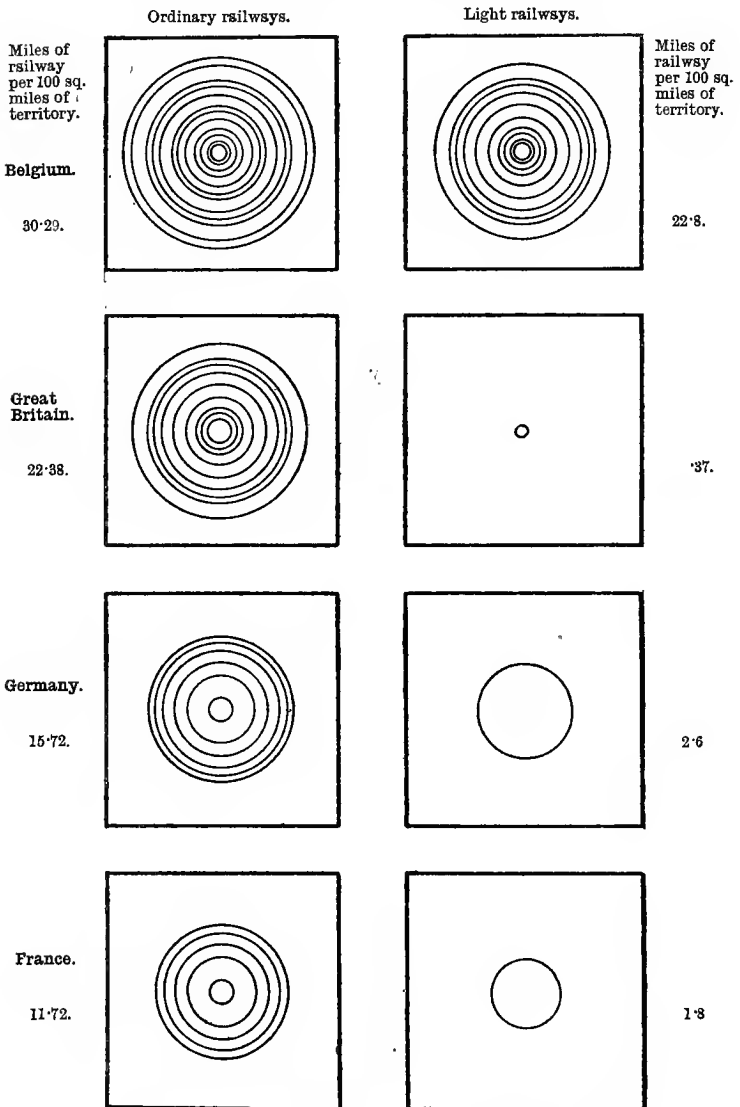
¹ See page 283.

² Belgium . . . (1908) 22·8 miles per 100 square miles of total area.
 France . . . (1903) 1·8 " " " "
 Germany . . . (1907) 2·6 " " " "
 Great Britain . (1908) 0·37 " " " "
 England and Wales (1908) 0·38 " " " "

³ The following table shows the development of light railways in Belgium:—

Year.	Length of Lines worked.	Capital.	Gross Revenue.
	Miles.	£	£
1885	36		3,505
1890	468	1,636,200	117,195
1895	781	3,007,080	236,139
1900	1143	4,964,360	393,661
1905	1687	8,598,880	607,496
1906	1821	9,483,040	669,452
1907	1960	9,969,040	711,302
1908	2091	10,696,840	759,654

THE COMPARATIVE MILEAGE OF RAILWAYS FOR A GIVEN AREA OF TERRITORY IN VARIOUS EUROPEAN COUNTRIES



amounted on December 31, 1908, to nearly eleven million pounds.¹ As shown above, the receipts during the year were nearly £760,000, of which rather more than two-thirds was derived from passenger traffic. On the average, passenger traffic yielded about £267 per mile of line, and goods traffic about £112. The total earnings per train-mile amounted to about a shilling,² and the expenses were 69·09 per cent of the gross receipts. This proportion is a trifle higher than for the two preceding years, when they were 67·75 per cent and 67·37 per cent respectively.

The average interest on capital earned by the different lines in 1908 amounted to 3·01 per cent. This is rather lower than the average for the decade 1899 to 1908 (3·22 per cent), the decrease being partly due to the large number of new lines which have not reached their full earning capacity, and probably also in part to the high price of coal.³

It will be remembered that the State, the Provinces, and the Communes have to pay $3\frac{1}{2}$ per cent interest and sinking fund on the capital value of their shares, because they have not purchased them outright, but are paying for them in annual instalments over a period of ninety years. As the capital is only earning on the average about $3\frac{1}{4}$ per cent, it follows that in order to fulfil their obligations, these bodies have each year to pay to the National Society a sum equal to one-quarter per cent of the capital value of their shares.

¹ Of this amount 42 per cent was subscribed by the State, $28\frac{1}{2}$ per cent by the Provinces, 28 per cent by Communes, and $1\frac{1}{2}$ per cent by private individuals. The State used only to subscribe 25 per cent of the total capital, but finding that the demands on the Treasury were so small, and the national advantages derived from the lines so great, it decided in 1896 to increase its contribution.

² The earnings per train-mile cannot be given separately for goods and passengers, as many goods trucks are conveyed along with passenger coaches.

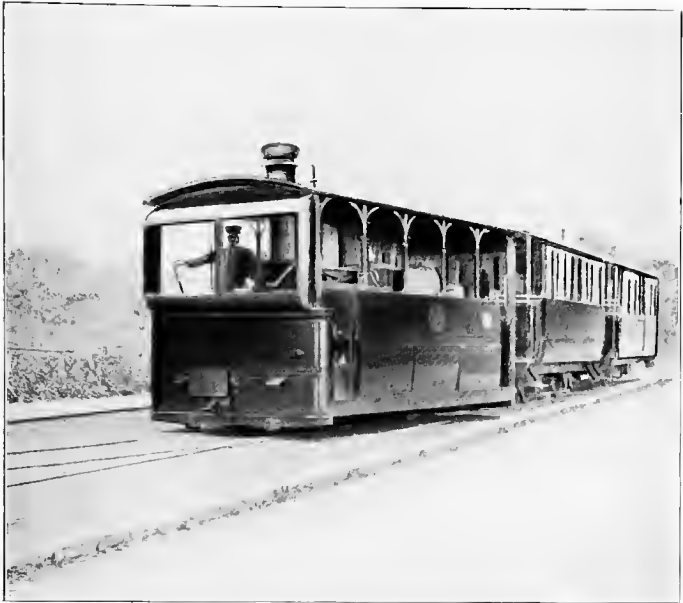
³ The interest earned by the lines varies greatly. Of 124 lines which had been working for more than a year at the end of 1908, 65 were in a better position than they were in the previous year. Of 118 of these, for which details are given in the report, 43 earned a dividend of $3\frac{1}{2}$ per cent or more, 18 a dividend between 3 and $3\frac{1}{2}$ per cent, 18 between $2\frac{1}{2}$ and 3 per cent, 13 a dividend between 2 and $2\frac{1}{2}$ per cent, 21 between 1 and 2 per cent, and 5 under 1 per cent. In no case were the working expenses greater than the receipts.

This quarter per cent per annum is all they pay for the purchase of a very valuable property, for at the end of ninety years the whole of the light railway system of Belgium will belong to them. Moreover, in view of the fact that the industrial companies who work the lines are obliged to keep them in good repair, and to replace rolling stock as it becomes worn out, it will be seen that although the interest earned is not a high one, the transaction from the national standpoint is exceedingly satisfactory, even if it be judged on a purely financial basis, without taking into account the enormous indirect benefit in the development of agriculture and industries. It is, moreover, to be expected that the rate of interest earned by the existing lines will tend to rise, for experience has shown that whereas the agricultural population makes immediate use of the lines for passenger traffic, it is some time before they are used extensively for the conveyance of goods. The farmers have conveyed their goods by road for generations, and they only realise slowly that carriage by rail may be more economical.

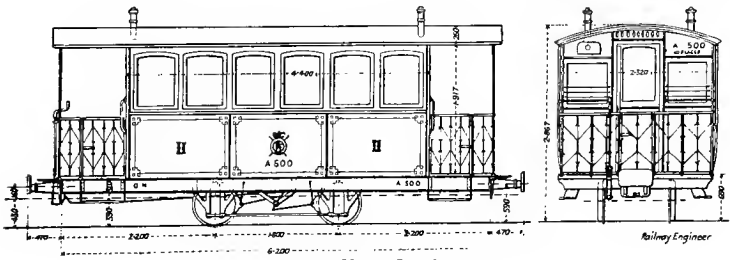
Another very important lesson which Belgium teaches is the necessity for the greatest economy in the construction and working of the lines. The Belgian light railways are really "light," and are very cheaply constructed. The low cost is due in part to the fact that many of them run on the high-roads.¹ As no charge is made by the public authorities for the right to run along a road, great economy may thus be effected. But the difficulties of running on public roads are sometimes—though by no means always—considerable, and complaints are made in some districts of its interfering with ordinary carriage traffic. The tendency, therefore, at the present time is increasingly to construct the lines on land specially acquired for the purpose, and consequently the cost of construction tends to increase.

According to official statistics, the average cost per mile of the Belgian light railways, including rolling stock,

¹ 55 per cent of the lines run along the ordinary public roads and 11 per cent along roads specially widened for the purpose. In Great Britain none of the thirty-five light railways other than tramways run on public roads.



TYPICAL ENGINE ON A BELGIAN LIGHT RAILWAY.
 Note the line running along the high-road.



Second-Class Carriage.

TYPICAL CARRIAGE ON A BELGIAN LIGHT RAILWAY.

To seat 24 inside and 10 on the platforms.*

* By permission of the *Railway Engineer*.

amounted in 1890 to £2753, in 1895 to £2987, in 1900 to £3044, in 1905 to £3523 and in 1908 to £3756. Although the figure has risen considerably in the last ten years, it is still exceedingly low when compared with the cost of construction in Great Britain and in other countries. According to figures given by M. Colson, Chief Engineer of Bridges and Roads in France, to the International Railway Congress of 1905, and quoted in the report of the English Light Railway Commissioners for 1906, the cost of construction of English light railways was £5860 per mile, as compared with £3400 in Belgium, £4500 in France, and £4180 in Prussia.¹ Thus we see that the Belgians can construct light railways at about half the cost per mile of the English. This may be partly because the land is less hilly in Belgium and the roads are straighter; but the difference is chiefly due to the fact that the Belgians do not use an equipment more costly or more solid than the work demands. With few exceptions the gauge of the lines is $39\frac{1}{2}$ inches.² The same economy marks the working of the lines. Except where a light railway crosses a main line there are no signals, the trains being worked just as trams are worked in England, and yet, although the speed runs up to $18\frac{1}{2}$ miles an hour, the number of accidents is not great in proportion to the number of train-miles.³

¹ It must be pointed out that the English figures, which are the only ones available, do not include the cost of equipment or other rolling stock, and do not cover the *whole* cost of construction. All the figures of cost of construction refer to the year 1903.

² Wider gauges are used in the case of a few lines which, on account of special circumstances, have to be joined to the trunk railway. An interesting expedient, resorted to in cases where it is found desirable to run trucks both of the national trunk lines and of the light railway line over the same track, has been the construction of double lines of four rails. The large trucks of local quarries or other establishments can thus be brought to the junction by the locomotives of the narrow gauge railway without reloading. The National Society has built eight such double lines of a total length of thirty miles.

³ In 1908, 53 persons were killed and 122 injured. Of these, 19 deaths and 7 injuries were due to attempted suicide or drunkenness or deafness, 18 deaths and 13 injuries to crossing the line in front of a train, 6 deaths and 15 injuries to ascending, descending or falling from a train in motion; 64 injuries and 2 deaths resulted from collisions. The total deaths and injuries amounted respectively to 3.67 and 8.47 per million train-miles. In the

Neither in construction nor in working is there any unnecessary expenditure; all is sufficiently solid, but there is no extravagance, and economies are effected wherever possible. It is recognised that the earnings of a light railway—especially in thinly populated districts—can never be such as to pay for costly construction or expensive systems of working. Existing cafés or shops serve as stations, just as post-offices are installed in shops in England. Goods trucks are usually attached to the passenger trains, but on certain lines where there is much goods traffic special goods trains are run, usually one or two a day in each direction. The minimum number of trains carrying passengers seldom, if ever, falls below five daily in each direction. The cheapness of labour, of course, is another reason why light railways are run at a lower cost in Belgium than in England. Salaries and wages vary in the different parts of the country and according to the importance of the line, but the following may be taken as a fair average. The wages paid in England for similar work have, as far as possible, been added for comparison.

	Belgian Rate of Wages.	English. ¹
1 Manager (per annum) . . .	£72 0 0 to £96 0 0	£156 0 0
1 Clerk (per week) . . .	0 18 4 ,, 1 2 10	1 5 0
Conductors ² (each, per week) . .	0 16 6 ,, 1 0 3	1 3 0
1 Foreman (per week) . . .	£1 7 6	1 7 0
Engine-drivers (each, per day) . .	0 3 7	0 5 0
Stokers (each, per day) . . .	0 2 5	0 3 8
Labourers (each, per day) . . .	0 2 2	0 3 0
Inspector of permanent way (per day).	0 2 10	0 4 6
Painters (each, per day) . . .	0 2 6	0 4 0
Cleaners (women, each, per day) .	0 1 7	(Men) 3 0

United Kingdom the deaths and injuries from accidents of all kinds on the main railways in 1906 were 4.54 and 28.04 per million train-miles respectively.

¹ The figures for England have been supplied by an engineer who has considerable experience in the construction and working of light railways in England.

² Passenger fares are collected *en route* by the conductors, as in trams and omnibuses.

Before leaving the financial aspect of the light railways, it is important to note how different are the standpoints from which it is viewed in Belgium and in England. In England light railways are looked upon by capitalists merely as an investment, and the interest they are likely to earn is compared with what other industrial investments would yield. In consequence, it is almost impossible to find capital for them. But the Belgians are quite satisfied if they can run their light railways without loss, and the State, recognising their great value in the development of the country, gives a guarantee which enables capital to be secured without difficulty on the lowest terms. The difference between these two points of view is fundamental. Light railways, except in a few isolated cases, will never do much more, financially, than just pay, but their intrinsic value to the community is inestimable.

Some idea of the extraordinary popularity of the light railways may be gathered from the following remark made to the writer by a friend in Belgium:—

“I believe,” he said, “that as a matter of fact practically every Belgian village cherishes the idea of sooner or later seeing one or more light railways constructed on its area. All these projects are not yet ripening; many of them are dreams which cannot be realised. But the frequency with which they are discussed shows how great is the popularity which the local railways enjoy. At present, houses along the highroads are almost everywhere so built that they shall not be in the way of possible road extensions for light railways in the future.”

One source of considerable delay in the construction of light railways, when these do not run on public roads, is the enormous number of different landowners with whom arrangements must be made. This, of course, is owing to the great subdivision of the soil. Up to the end of 1906 the National Society has had to make arrangements with 34,000 landowners, or about 46 owners for every mile of line constructed on land specially acquired. Although causing delay, this extreme subdivision of land probably renders unreasonable demands for compensation less frequent, for if any one urges them a detour to the right or left of

his land can easily be made. Generally, however, the price to be paid for the land is settled amicably, and exorbitant claims are not put forward. The National Society has the right of compulsory purchase.

We must now pass to a brief statement of the amount and nature of the traffic on the light railways, and their general effect on the economic and social life of the country.

Taking a few of the chief agricultural products, we find that in 1907 the following quantities of goods were carried (the figures refer to full truck-loads only): 371,000 tons of beetroot, 202,000 tons of beetroot pulp, 11,400 tons of sugar, 86,000 tons of cereals, 36,000 tons of flour, 37,000 tons of potatoes, 103,000 tons of timber, 31,000 tons of fodder, about 108,000 tons of cattle, and 16,000 tons of milk. In addition, 149,000 tons of fertilising materials were conveyed.

Of other merchandise traffic, the chief items are the following: 451,000 tons of coal, 222,000 tons of stone, 526,000 tons of gravel, 186,000 tons of sand, 67,000 tons of lime, 78,000 tons of ashes, 41,000 tons of minerals, 14,000 tons of cement, and 192,000 tons of bricks. The total transports during the year conveyed in full truck-loads amounted to about 3,952,000 tons.

The rates charged vary according to the class of goods carried, but the usual charge for heavy goods of low value is 1d. per ton per mile, and for other goods from $1\frac{3}{4}$ d. to 2d. per mile. In both cases there is also a fixed initial charge of $4\frac{3}{4}$ d. irrespective of distance.¹

The total number of travellers by the light railways is not known, but the receipts from passenger traffic amounted to £533,160 in 1908. According to a high official in the National Light Railway Society, the average payment per passenger is just under $2\frac{1}{2}$ d. Adopting this figure, we arrive

¹ For further particulars regarding the charges made on light railways in Belgium, see Appendix XVI., where a comparison with those of an English railway is given. As there are practically no light railways in Great Britain, the rates of the Belgian light railways are compared with those of a main line.

at $53\frac{1}{2}$ millions as the number of journeys made, *i.e.* 146,000 per day. The average fare is $\frac{3}{4}$ d. per mile.¹

Everywhere in travelling through Belgium one hears of tracts of land opened up to profitable agriculture or commerce by means of the light railways. M. C. de Burlet, General Manager of the National Light Railways Society, gives some interesting illustrations of this in a paper read to the International Railway Congress of 1900.

"In the Campine," he says, "only to mention iron ore, land-owners were formerly quite glad to get rid of the top layer of the soil which contained it, at no expense to themselves, because it made their ploughed and grass lands unproductive. But now the sale of the ore brings in twice as much as the land below.

Great pine forests, previously difficult to get anything for, now find a ready and profitable market.

By connecting the State pauper colonies at Hoogstraeten and Merxplas with Antwerp it has been found possible to fertilise and cultivate tracts of moorland with the town manure conveyed at low rates, and give work to thousands of unemployed.

Another source of very heavy traffic exists in the province of Liège, on the Poulseur and Sprimont line, which connects the quarrying centre of the high plateau with the State railways. Previously firms used to cart their goods to Poulseur, Rivage, Aywaille, or Trooz, according to their destination. This meant sending them from $1\frac{1}{2}$ to 2 leagues (4·7 to 6·2 miles) by road, and cost six, seven, and even eight francs per cubic metre (3s. 6d., 4s. 1d., and 4s. 8d. per cubic yard) of dressed stone. Under such circumstances competition was difficult; moreover, it hardly paid to work paving-stones, and the quarry refuse had to be kept where it was, which eventually led to the blocking of the quarries and the surrounding land with waste. The light railway serving eight quarries brought about a radical change; all the quarries have grown and extended wonderfully. The cutting of paving-stones becomes a more important industry every year, owing to the convenience of carriage and low freight, and the quarry waste, which realises about eight shillings per truck-load, no longer blocks the works and the adjacent ground. The waste is sold for repairing or making roads, and for the manufacture of lime, which is now used in sugar refineries in place of animal charcoal. A large number of consignments are ordered by the agricultural department, which, under the Act of June 28, 1896, is in this way improving the country roads."

¹ The ordinary first-class fare is 1d. and the second-class $\frac{3}{4}$ d. per mile; but on some lines the second-class is sometimes less than $\frac{3}{4}$ d., as fares are charged not per mile but per section, and the sections may be more than a mile.

These illustrations will suffice to show how great has been the influence of the light railways in developing the agricultural and industrial resources of the country.¹

Almost more important than the transport of produce in bulk is its carriage in small quantities. Usually special fares are arranged for persons taking, say, 132 lbs. or 220 lbs. (60 or 100 kilog.) of market produce² to the towns or to the junctions of the trunk line. They may either bestow their load in the second-class carriages or in the special luggage vans provided free of charge. If the farmers send their goods instead of going with them, the rates charged on the light railways are extraordinarily low. For instance, to send 44 lbs. (20 kilog.) of cheese, eggs, vegetables, ham, etc., a distance of 13 miles costs only 3d., while they can be sent 62 miles for 7d. Other rates are proportionately low.³ Special trains are run for the convenience of market gardeners who have to get their produce in good condition to the morning markets. On the line between Brussels, Shepdael, and Ninove, for example, a special night train runs during the strawberry season; another line has specialised on the supply of the capital with milk, and carries about fifty tons daily.⁴ Again and again farmers have told the writer that the present extraordinary development of agriculture is to no small extent due to the facilities offered by the light railway system. The passenger traffic, too, is steadily growing, and new districts are being developed as holiday resorts.

But there is another aspect of the question which must

¹ In England the development of light railways has been checked by the opposition of existing railway companies, who fear their competition. Belgian experience, however, seems to show that, so far from competing with the main system of railways, as was at first feared, the light railways act as feeder lines. As M. de Burlet says: "Such data as we have collected justify us in affirming that the light railways have in a large measure contributed towards the increase of traffic."

² On English railways passengers are allowed to take 60 lbs. free of charge.

³ These charges do not include delivery at domicile.

⁴ The writer is aware that special facilities for the transport of seasonable produce are also given by some of the English railways, but cultivators in the more remote agricultural districts cannot take advantage of these.

be referred to before this chapter closes, namely, the enormous rise in land values in the districts through which light railways pass. For instance, in Dilbeek, one of the communes in the strawberry-cultivating area outside Brussels, the writer was told that land close to the light railway line is let at about £5 per acre, as against £4 for land of the same quality at a little distance. He was also told of a case in the same neighbourhood where the selling price of land had more than doubled owing to the introduction of the light railway system. Other interesting instances are given by M. C. de Buret, who says:¹ "Through the increased travelling facilities to outlying places in the Ardennes and in the Dunes, new enterprises have been undertaken, which have had the immediate effect of doubling and trebling the price of land. In Middelkerke, for example, we have a watering-place created by the local railway, where the rateable value has increased by over 200 per cent in fifteen years, and the cost of building land has risen from 4d. per square yard to 2s. 4d. during the same period. Similarly, the construction of the line from Samson to Ardenne in the valley of the Meuse has raised the price of land within two years by 100 per cent." From other instances which have come to the notice of the writer two more may be cited. In the commune of Lahamaide (Canton Frasnes) a light railway was built in 1902. The price of land, which previously averaged £60 per acre, rose to an average of £73, *i.e.* 22 per cent. In Wasmes, Audemez, Briffoeuil (Canton Peruwelz), the price of agricultural land had long been stationary at an average of between £53 and £56 per acre; but since the construction of a light railway—from Peruwelz to Tournai—in 1900, it has risen to between £62 and £68, *i.e.* 18 per cent.

These instances, which might be multiplied almost indefinitely, of the increase in land values which follows the establishment of light railways will serve to illustrate a general principle. It is one with which the writer has

¹ Report to the International Railway Congress of 1900.

constantly been confronted as he has studied the various efforts made by the Belgian people to improve their economic position. Whether it be transport facilities, or the more intensive cultivation of the soil, or the introduction of co-operative methods, or the discovery of chemical manures, or better education in agricultural processes, the result in each case has been the same—to raise the value of the land. In the case of light railways it is not, as a rule, the little peasant who works on his farm beside them who benefits most, nor is it the manufacturer who builds his factory, or the forester who plants his forests in districts opened up by the new lines. It is the owner of the soil who ultimately benefits, because he has the right to levy upon all of these a tax in the form of increased rent.

Only one-third of the land in Belgium is cultivated by the owners; and the tenants of the remaining two-thirds cannot ultimately escape from this tax, which robs them of a large part of the additional profits due to the railways.¹ The development of agriculture does not, therefore, necessarily mean an improvement in the lot of the agriculturist. The position of Belgian farmers has undoubtedly improved during recent years, but the improvement would have been far greater if they had not paid such heavy toll to the owner of the land on every fresh advantage, whether accruing to them from outside or won by their own enterprise and effort.²

III. RIVERS AND CANALS

The Belgian system of inland waterways is one of the most complete in the world. There is a whole network of

¹ The writer is aware that many landlords in Belgium do not exact rack rents, especially from old tenants, but this fact does not affect the economic position stated above.

² Since this chapter was written, the British Government has made known its intention of creating an Agricultural Development Fund. In view of the great importance of transport facilities to agricultural prosperity in many districts, it may be hoped that the question of the creation of a system of light railways will occupy the attention of the authorities responsible for the application.

them, connecting her industrial and agricultural centres with each other, with her ports, and with adjacent countries; and fresh improvements are always being made to meet the exigencies of increasing traffic. Thus there are large canals leading to Ghent, Bruges, Ostend, and Zeebrugge, while the Scheldt, leading to Antwerp, and artificially deepened in parts, is one of the most important waterways in the world. The canals are an immense advantage to towns like Liège, engaged in the production of heavy goods, which can be sent by water to the port twice as cheaply as by rail—though the latter is cheap.¹

The total length of navigable inland waterways is 1349 miles—604 of canals and 745 of rivers.² Their combined mileage is about half that of the main railways. Almost all of them belong to the State.³ Large sums of money have been spent in their construction or improvement, and the receipts do little more than pay the cost of upkeep. Thus practically no interest has been earned on the capital invested, which amounts to fourteen million pounds. The Belgian Government regards waterways much as roads are regarded in Britain; and it is not expected that interest shall be earned on the capital invested, but merely that those who use them shall pay the cost of upkeep. Just as in Britain roads are maintained by local rates, in Belgium canals are maintained by extremely low tolls. The haulage is undertaken on commercial terms by barge-owners; only the canals themselves belong to the State.

It is clear that Belgium regards her canals as a valuable factor in her industrial and agricultural success, for though they pay no interest on capital, and lessen the traffic on

¹ To convey a consignment of 300 tons of rails from Liège to Antwerp would cost about £79 by rail, and £39 by canal.

² Of the latter, 210 miles have been artificially deepened.

³ Of 1349 miles the State owns	. . . . .	1248 miles
The provinces and communes own	. . . . .	24 „
In private hands . . . . .	. . . . .	77 „

the railways, which is comparatively lucrative, she goes on deepening and improving them, and even adding and constructing new ones. "It is evident," said the British Consul-General for Belgium in his statement before the British Royal Commission on Canals, "that to them Belgium greatly owes her present prosperity: the waterways are of vital importance to the trade of the country."¹ Certainly they are largely used—the traffic in 1907 amounting to no less than 52,249,129 tons.²

When, on account of long-continued frost, the canal traffic is stopped, the industries of the country are seriously disorganised, for apart from the fact that carriage of goods by railway costs, roughly speaking, double that by canal, the railways cannot possibly cope with the increased traffic caused by a long and severe frost.

A comparison of the development of river and canal traffic in Belgium with that in England and Wales is interesting. In England and Wales, in 1905, the total length of canals and navigable rivers was 3639 miles, and the consignments amounted to 41,000,000 tons.³ Thus, although the area is about five times that of Belgium, the length of inland waterways is less than three times as great, and the Belgian traffic is actually 27 per cent greater than that of England and Wales. Such figures are worthy of consideration by those anxious to develop English industry

¹ Evidence of Sir Cecil Hertslet. Cd. 3184 (1906), p. 110. The whole evidence given by this witness is full of excellent and interesting information on the subject, as is also his Consular Report No. 604 (1904).

² Only a comparatively small part of this traffic is international, the weight of goods which entered and left Belgium by canal or river being about seven and eight million tons respectively. Thus the great bulk of the traffic was from one part of the country to another.

The total number of ton-miles travelled on the canals in 1907 was 732,234,936 made up as follows:—

Mineral fuel	197,929,129 ton-miles
Industrial raw materials and products	299,863,159 "
Timber	19,527,161 "
Agricultural products	124,726,717 "
Miscellaneous	90,188,768 "

³ Extracted from tables compiled at the instance of the Royal Commission on Canals and Waterways, 1907. Of the 3639 miles, 965 are owned by railway companies and 218 controlled by them.

and commerce. They point to the fact that the view hitherto taken of English canals, viz. that they are dividend-earning investments, may be the wrong one from the standpoint of national well-being. Belgian experience also shows clearly the advantage of unity of administration. Her 1349 miles are controlled by one State department, and developments in canal facilities are always considered from the standpoint of the public good. "The canals of Belgium," said Sir Cecil Hertslet, in his evidence to the Commission already quoted,¹ "are so arranged as to be a benefit to the whole commercial population, and not of particular advantage to one or more industries. The endeavour is to have every section of the manufacturing districts in direct touch with the large towns of Belgium, with the sea-board, and with the manufacturing centres of other countries, for the interchange of commodities and other manufactured goods." It might seem ironical to compare this state of things with the 129 independent canal systems of England and Wales, each less concerned about the national welfare than its individual dividends.

Certainly Belgium is a flat country, and the cost of construction is less than if it were hilly, less therefore than it would be in many parts of England and Wales; but she has over 300 locks on her 1349 miles of navigable waters.

Before leaving the subject of water carriage, mention must be made of the Belgian ports—Antwerp, Ghent, Ostend, Zeebrugge, and Bruges, and others less important. Over $13\frac{1}{2}$ million tons of shipping entered them in 1907, of which about 11,000,000 tons went to Antwerp; Ostend and Ghent coming next with rather less than a million each. Many of the ports, such as Ghent, Antwerp, and Ostend, are municipally owned and managed, others have been conceded to private companies, but strict regulations are laid down as to the tolls they may charge. The Government, recognising the great value of good ports in the nation's commerce, has advanced large sums for their construction, and at the present time is spending

¹ Cd. 3184 (1906), p. 102.

seven and a half million pounds in improving the port of Antwerp. When the works are completed they will be made over to the city, on terms to be arranged.

IV. ROADS

Our survey of the transit facilities in Belgium may conclude with a few words on Belgian roads. It is not enough to have good railway facilities; farmers must be able to convey their produce easily and cheaply to and from the stations and the towns. Belgium has an excellent road system. Between 1830 and 1904 the length of main roads was increased threefold (from 1888 to 5916 miles), so that now there is about half a mile for every square mile of territory. There is also a very complete system of smaller local roads, with a mileage more than twice as great as the main ones ($1\frac{1}{4}$ miles per square mile of territory). The improvement in the road system has been of great advantage to Belgian agriculture, but, as in the case of light railways, much of this advantage has gone to the landlord rather than to the worker. Here, for instance, are two replies received by M. E. de Laveye when investigating the state of Belgian agriculture in 1878:—

From the editor of the *Courrier agricole de Saffelaere*—

The improvement of the roads has raised the selling price of land 40 per cent and rent 10 per cent.

The *Société agricole du Limbourg*—

The highways and local roads are in an extremely satisfactory state. The facilities which they afford to the agriculturist for the transport of his produce to the town markets, etc., have much increased the rent of land, which has doubled in twenty-five years. . . .

The main roads in Belgium are as a rule fairly well kept, many of them being paved with stone setts. The cost of upkeep of the small local roads falls on the communes, but as the population in some of them is either so scanty or so poor that it cannot really afford to maintain proper roads, the Government passed a law in

1896 under which grants are made to impecunious communes for the purpose of road-making. This is an illustration of the practical help given by the State to the development of Belgian agriculture.

CONCLUSIONS

Before closing this chapter we may briefly summarise the facts contained in it. We have seen that whether we considered her roads, canals, main railways, or light railways, Belgium is exceedingly well served. Apart from her wonderful system of light railways, she has a greater length of main railways per square mile of territory than any other country in the world. These are, on the whole, well managed, though if the accounts were kept in accordance with ordinary business methods they would show a deficit. This, however, is not a serious matter, in view of the great advantages which the Belgian people derive from the low rates charged both for the conveyance of passengers and goods. The marvellous facilities granted to workmen tend greatly to increase the mobility of labour and to equalise wages and reduce unemployment.

The light railways, with their interesting system of finance, are rapidly opening up the most remote parts of the country, and helping to develop both industry and agriculture, while the canals are of the greatest value to those industries where a very cheap conveyance of heavy goods is of more moment than rapidity of transit.

There is, in short, no doubt that the excellent transport arrangements throughout Belgium are largely responsible for her agricultural and industrial prosperity; but it is equally clear that an undue share of the benefits has been claimed by the owners of the land in the vicinity of the roads, railways, and canals.

CHAPTER XXII

THE SYSTEM OF TAXATION

It is a commonplace of political science that the social and economic welfare of a country is vitally affected by the system of taxation, and we must therefore study this question in Belgium.

Our investigations will be confined to such questions as the following: "Is the burden of taxation light or heavy?" "Is it levied upon the community in proportion to the capacity of the respective classes to bear it?" "Is it so levied as to hinder or develop industrial and economic forces?" And, finally, "Is the money raised by taxation devoted to objects which ameliorate the general conditions of life, or to those from which the people obtain little or no benefit?"

Official figures are available showing the national and provincial income and expenditure, and also that of the sixteen communes having more than forty thousand inhabitants; but there are no such figures later than 1880 for the 2611 communes with a population of less than forty thousand, and without them no complete account of the taxes of the country can be given. But, thanks to the courtesy and help of the Minister of the Interior, a special investigation has been undertaken, and full statistics obtained, of the income and expenditure of all communes having from twenty to forty thousand inhabitants, and also of 352 smaller ones, distributed all over the country. The labour of preparing the statement of accounts for the 352 communes on a uniform basis—kindly undertaken by the

local authorities at the request of the Minister of the Interior—was considerable, as was the work of co-ordinating all the figures after they had been supplied to the writer. In view of the very laborious nature of the work, it would not have been practicable to obtain figures for every commune in Belgium, but various tests that were applied showed that the 352 communes whose accounts were investigated may be regarded as typical.¹ Assuming them to be so, it is now possible to present a complete statement of the national, provincial, and communal income and expenditure.² This is as follows:—

¹ A table showing the results of this enquiry is given in the Appendix, pp. 592-3.

² In the table an attempt is made to arrive at *net* figures. Thus only the profits and losses on trading enterprises, such as railways, trams, etc., are taken into account; moreover, the analysis of both income and expenditure differs from that of the published figures in such a way as to show more clearly the exact sources of income and purposes of expenditure. As far as possible, all debt charges have been allocated to the different purposes for which the debts were incurred, and the expenditure of departments which are responsible for various services has been analysed. The statement has been drawn up from a sociological and not merely from a book-keeping standpoint.

The figures refer to the year 1905, the latest date for which the necessary figures were available when the work of compilation was begun at the end of 1908.

BELGIAN FINANCES,

INCOME.				
Sources of Income.	National.	Provincial.	Communal.	Total.
	£	£	£	£
Taxes	2,529,520	763,080		3,292,600
Customs	2,082,360	..	..	2,082,360
Excise	3,540,360	..	..	3,540,360
Rates . . . . .	..	..	3,057,840	3,057,840
Registration, Fee Stamps, and Stamp Duties	2,788,440	..	..	2,788,440
Total of Taxes	10,940,680	763,080	3,057,840	14,761,600
Post Office and Telegraph—				
Receipts £1,277,480				
Expenses (Ordinary) £934,840				
„ (Capital) 77,120				
1,011,960				
Revenue from Public Property	265,520	..	..	265,520
Profits on Trading Enterprises	170,560 ¹	3,060	683,320	856,940
Tolls and Dues (Markets, Ports, Canals, etc.)	292,000	..	78,070 ²	78,070
Miscellaneous	502,720	156,200	2,577,480 ³	3,236,400
Total of other receipts	1,230,800	159,260	3,338,870	4,728,930
Grand Total	12,171,480	922,340	6,396,710	19,490,530
Percentage of Total	62.5	4.7	32.8	100

¹ Crown Lands.

² This is an estimated figure. The total receipts from trading enterprises were about £780,760, and the profits have been reckoned as 10 per cent of the takings. The writer recognises that this figure may be incorrect, but any possible difference between it and the actual figure could only represent the merest fraction of the total income of the communes.

³ This sum is rather too high, as it includes certain small Government Grants which cannot be separated.

NATIONAL AND LOCAL (1905)

EXPENDITURE.				
Items of Expenditure.	National.	Provincial.	Communal.	Total.
	£	£	£	£
Civil List, Political and other Pensions	241,560	..	..	241,660
War { Ordinary £2,567,640 }	8,257,880	..	25,080	3,282,960
{ Capital . 690,240 }				
Foreign Office, Consular and Diplomatic Services	188,520	..	..	183,620
Agriculture { Ordinary £218,840 }	235,840	..	..	235,840
{ Capital . 17,000 }				
Cost of Collection and Administration of Customs and Inland Revenue	881,640	..	..	881,640
Internal Administration of the Country { Ordinary £328,860 }	332,360	..	1,177,760	1,510,120
{ Capital . 4,000 }				
Education { Ordinary £1,128,040 }	1,351,040	174,960	1,646,240	3,172,240 ⁸
{ Capital . 223,000 }				
Law	476,480	34,560 ⁶	..	511,040
Religion	287,040	18,440	40,400	345,880
Friendly Societies	691,520	..	..	691,620
Labour Department { Ordinary £267,120 }	271,840 ⁴	..	..	271,840
{ Capital . 4,720 }				
Railways—				
Receipts	£9,749,520			
Expenses (Ordinary) £6,582,280				
,, (Capital) 3,276,920				
.	9,859,200			
	100,680	60,920	..	170,600
Poor Law { Ordinary }	2,920	84,120	700,440	787,480
{ Capital £2,920 }				
Prisons and Police { Ordinary £129,280 }	220,560 ⁵	..	..	220,560
{ Capital . 91,280 }				
Public Works { Ordinary }	636,680	..	286,680	923,360
{ Capital £636,680 }				
Industrial Schools and Labour Colonies	227,720	..	..	227,720
Public Health	204,480	..	249,920	454,400
Roads and Bridges { Ordinary £588,440 }	1,404,760	188,600	271,920	1,865,280
{ Capital . 816,320 }				
Interest and Sinking Fund on Loans . . . . .	..	..	2,089,920 ⁷	2,089,920
Miscellaneous { Ordinary £420,240 }	833,720	424,640	168,660	1,427,020
{ Capital . 413,480 }				
Grand Total	11,851,240	966,240	6,657,020	19,494,500
Percentage of Total	61·0	5·0	34·0	100

⁴ Includes "Commerce."⁵ In Belgium the State has practically nothing to pay for the maintenance of prisoners, this being covered by part of the wages paid by manufacturers for the work executed in the prisons.⁶ Includes Prisons and Gendarmerie.⁷ These loans cannot be distributed over the different services, as the necessary particulars are not obtainable, but practically all the money borrowed has been expended on Public Works, School Buildings, and Roads and Bridges.⁸ Part of the cost of Buildings is included in "Public Works."

It will be noted that 62 per cent of the money raised in the country is from national, about 5 per cent from provincial, and 33 per cent from communal sources. The total sum raised is nearly twenty million pounds, equal to £2:14:5 per head of the population. But this is not all raised by taxation, for nearly five million pounds come from other sources. Thus Belgium is certainly not a heavily taxed country. It is much less so than the United Kingdom, as will be shown later in the chapter.

Let us now examine the system of taxation, and see how far the burden is distributed in accordance with ability to bear it, and whether the taxes are such as to develop or to hamper industry and enterprise.

It will be simplest to deal first with the national system, for, as will be shown later, that of the communes and provinces is largely based upon it.

Over one-third (38 per cent) of Belgian national taxes are raised by indirect taxation, viz. 24 per cent by excise, and 14 per cent by customs duties. Of the direct taxes, 51 per cent are raised by fees, taxes on mortgages, estate and succession duties, 20 per cent by a land tax, 17 per cent by various personal taxes, 9 per cent by a tax on trading and professions (*droit de patente*), and just over one-half per cent by a tax on mines.

The excise duties are levied principally on alcoholic beverages, the only other articles thus taxed being margarine, vinegar, tobacco, and sugar, which together only account for about one-seventh of the total excise duties.

The customs duties call for more detailed examination, and the policy Belgium pursues with respect to these is well described by Sir Cecil Hertslet, the British Consul-General for Belgium, who writes:—¹

The amount collected as customs duty upon imports into Belgium appears to be an absurdly small one when it is considered that Belgium is supposed to be a "protected" country, but the truth in regard to the customs tariff of this country is that it is imposed more with a view to protecting certain manufacturing and other industries,

¹ *Diplomatic and Consular Reports*, Annual Series, No. 4147. Cd. 3727-30, 1908, pp. 14 and 15.

while admitting the free importation of practically all the necessities of life, with but very few exceptions, than with that of collecting revenue for the necessities of Government. The tariff, as framed in Belgium, gives a certain preference to home manufactures for the supply of home wants, while the restriction on the importation of foreign goods is in most cases but a slight one. This is clear from the fact that the value of the total imports in 1907 amounted (as already shown) to £150,944,000 in value, while the total import duty imposed thereon amounted to only £2,311,520, from which it will be seen that, taking the total imports and total duty, the average percentage of duty on imports is only 1·53 per cent.

The principal articles producing revenue from the imposition of customs duties in 1905 were as follows:—¹

	Per Cent of Total Customs Duties.
Tobacco	9·7
Cotton goods	9·2
Wood for building purposes	8·6
Oats and seeds	7·0
Haberdashery and hardware	5·4
Exotic fruit and dried plums	5·3
Clothing	4·8
Woollen goods	4·4
Spirits	4·2
Iron and steel	3·6

Between 1 and 3 per cent of the total customs revenue is produced by each of the following:—

Silk goods, livestock (sheep and oxen), machinery, cheese, beer and other fermented drinks, butter and margarine, metal (manufactured), furniture, conveyances (except rail and tramway cars) Together .	17·0
--	------

while each of the following produce less than 1 per cent:—

Foodstuffs preserved in sugar, hides, printed matter (<i>produits typographiques autres</i>), wood (various), leather goods, honey, rubber goods, paper, china, waxed cloth of all kinds, ordinary glass-ware Together .	7·2
--	-----

All these accounted for 86 per cent of the total customs revenue in 1905. It will be noted that there is a low duty on a large number of partially or wholly manufactured articles, and that nearly all foodstuffs are admitted free. There is, however, a tax on meat—except bacon—and on

¹ The figures for 1905 are here given rather than those for a later year, as this is the year for which other taxes are given.

dairy produce — except some of the cheaper varieties of cheese. As in all protected countries, each trade and industry puts pressure on the Government to increase the protection on goods which it produces; the efforts of the powerful *Boerenbond* (Peasants' League) in this direction have been already referred to.¹

Not all the duties are protective in character; for instance, exotic fruits and certain other articles not produced in the country are dutiable.

Turning to direct taxes, the registration fees and estate duties have been dealt with at length in Chapter V. Here it need only be stated that they are very high. The charges on the transfer of land, by sale or otherwise, usually amounting to $8\frac{1}{4}$ per cent or more of its capital value, undoubtedly constitute a considerable burden. The succession duties on land vary from 1·4 per cent of its capital value in the case of lineals to 13·8 per cent in that of distant relatives.

Of the other direct taxes the most important is the Land Tax, which is levied on an extraordinarily antiquated basis. It consists of 7 per cent on the "cadastral revenue" of property, be it buildings or land. This "cadastral revenue" represents the actual letting value during the ten years 1849-1858. It has never been altered since it was fixed, although, of course, the values have changed entirely during the past fifty years. Hence the "cadastral revenue" bears little relation to the present value of landed property.²

¹ See p. 234.

² The following examples taken from actual documents show this:—

Nature of Property.	Area.	Actual Present Value.	Rent.	Cadastral Revenue.	Land Tax.
AGRICULTURAL					
LAND—					
	Acres.	£ s. d.	£ s. d.	£ s. d.	s. d.
(1) Garden . . .	0·12	14 0 0	1 0 0	0 9 7	0 8
(2) Arable land . .	2·17	104 0 0	3 11 2	3 14 3	5 2
(3) Meadow . . .	0·50	16 0 0	0 12 10	1 10 10	2 2
BUILDING LAND—					
(4) House (town) .	0·04	1080 0 0	52 0 0	16 5 4	22 7
(5) House (country)	0·86	600 0 0	24 0 0	14 19 10	21 0

though the divergence is less in the country than in towns, where enormous changes have taken place. The tax is also charged on the cadastral value of improvements in buildings, and on new buildings, but this value is only determined by comparing the new with the old, and it is in reality based on the 1858 valuation. Thus, although Belgium has a land tax, it is not so framed as to induce owners to employ their land to the best advantage, nor does it secure for the community the unearned increments in land values.¹

Not much need be said about the so-called "Personal Taxes." These are, first, a tax of 5 per cent on the "taxable rental value" of all houses,² which must be distinguished from the cadastral value. It is fixed by comparing the house to be assessed with a similar house in the same commune whose taxable rental value dates from valuations carried out in 1872-1876. Formerly the taxable rental value was re-assessed from time to time so as to accord with the *real* rental value, but as this method led to many electoral frauds it was abandoned, and the assessment, once made, remains unchanged. As a consequence, there is seldom any relationship between the *real* and *taxable* rental value.³

¹ The land in Belgium is, in fact, used to much better advantage than in Britain, but this results from its great subdivision and not from the system of taxation.

² In addition to the 5 per cent there is a further tax of 35 per cent on the value of the tax. Thus if the assessed rental value of a house were £14, the tax would be

$$\begin{array}{r} 5 \text{ per cent on } £14 = 14\text{s.} \\ 35 \quad \quad \quad \quad \quad 14\text{s.} = 4\text{s. } 11\text{d.} \\ \hline \text{Total} = 18\text{s. } 11\text{d.} \end{array}$$

³ A few examples taken from documents will substantiate this statement:—

Description of Property.	Rent.	Taxable Rental Value.	Tax paid : 5 per cent on Rental Value and 35 per cent on Tax.
Town house	£ 44	£ s. d. 14 0 0	s. d. 18 11
Farmer's house	12	2 16 0	3 10
Business house in country .	16	5 0 0	6 9

This tax is only levied on houses whose assessed rental value exceeds 34s. a year, or whose actual weekly rent exceeds 1s. It is not levied on factories, sheds, churches, schools, and other public buildings, or unoccupied houses, whether furnished or unfurnished. The list of exempted buildings was further extended by a law, passed in 1895, which exempted almost all working men from the payment of house duty, and also from the taxes on doors, windows, and furniture.¹ The tax on doors and windows, popularly known as the "tax on fresh air," or the "tax on light," varies from 9½d. for each of these in small communes, to 1s. 9d. plus 15 per cent in large ones, and that on furniture amounts to 1 per cent on its assumed value, which is, as a rule, much below its actual value. Another tax is that on servants, which varies from 6s. 5d. to 32s. for each, according to sex, number kept, and the kind of work they do. Taxes are also imposed on horses kept for pleasure, varying from 46s. where only one is kept, to 73s. 7d. per horse where five or more are kept. Special arrangements are made for job-masters and horse-breeders.

A more important tax is that on traders and professional

¹ The conditions of exemption are as follows:—

In Communes with a Population of	Total Exemption granted to those whose "Rental Value" is assessed at		Half the Tax is remitted to those whose "Rental Value" is assessed at			
	s.	d.	s.	d.	e.	d.
10,000–25,000	less than	40 0	from	40 0	to	59 4
25,000–50,000	„	51 0	„	51 0	„	67 10
50,000–75,000	„	59 4	„	59 4	„	76 4
75,000 and over.	„	67 10	„	67 10	„	84 10

Note that these figures refer to "rental value," not to actual rent paid. As already explained, the former is very much lower than the latter. In addition to these exemptions, certain others are made for old and invalided workmen.

men (*droit de patente*) which is levied on all persons engaged in commercial, industrial, or professional pursuits. These are grouped, and taxed accordingly, the basis of taxation being the supposed relative importance and utility of the different occupations and the outward signs of the relative prosperity of the persons engaged in them—signs which often give a very imperfect indication of their actual financial condition. The taxes vary enormously, being as low as 10d. per annum and as high as £22:18s. This trading tax must not be looked upon as an income tax, for there is no income tax in Belgium except in the case of limited liability companies, which pay a tax on their net profits.¹

Certain persons are exempted from payment of the trading tax, namely, clergymen, Government officials of all kinds, barristers, artists, sculptors, farmers, quarry and mine owners, small tradesmen working for themselves or only assisted by members of their families, workmen, and all those whose income is below £48 a year.

The only other tax which calls for comment is that levied on mines, and it is of small importance, producing less than one-half per cent of the revenue raised by taxation. It consists of 20s. 9d. per square mile of mine, and $2\frac{1}{2}$ per cent of the net profits earned, plus 25 per cent on both.

We now pass to the system of provincial taxation, which can be disposed of in a few words, as practically the whole of it, although levied by the provincial governments, is collected by the national authorities in the form of *centimes additionnels* on their "personal," land, and trading taxes. When levying these, an addition is made to them which is handed over by the national to the provincial authorities, who pay a sum agreed upon towards the cost of collection. Besides these *centimes additionnels* the provinces levy small taxes on dogs, bicycles, motor-cars, etc., and make a charge for licences for the sale of tobacco and drink, and for the

¹ A few communes impose local taxes which are based on a somewhat arbitrarily fixed estimate of the income of the taxpayers.

right to carry a gun; but the total sum so raised is unimportant.

Communal taxes, which correspond to "rates" in Britain, are more important, their estimated total being over three million pounds. Rather over one-third (35·4 per cent) of them consist of *centimes additionnels*, collected for the communes by the national authorities. The remainder is obtained in a great variety of ways, each commune arranging its own method of raising money, subject to a certain control by the Provincial Permanent Committee.¹ Among the taxes most frequently imposed are those on brick-kilns, quarries, mines, markets, factories (either according to the number of workmen employed or horse-power of engines), sale of tobacco and drink, public amusements, funerals, profit of limited liability companies, hawkers, balconies, cellar-holes in footpaths, dogs, motor cars, bicycles, pianos, etc.

The communes also get substantial national grants to compensate them for the loss sustained by the abolition of the communal tolls (*octrois*) in 1860, besides grants for special purposes, *e.g.* building of churches, hospices, hospitals, and schools; maintenance of foundlings, education, improving the water supply, and road-making.

But the burden of local taxation is much less than in Britain. Taking the country as a whole, local taxes are only about a quarter of what they are in the United Kingdom, namely, 8s. 6d. per head of the population against 30s. 8d. The difference is not so great, however, if the large towns in both countries are compared. For instance, taking the twelve largest towns in Belgium, local taxes average 22s. per head of the population, varying from 8s. 2d. per head in Malines to 40s. per head in Brussels. In twelve large English provincial towns the local rates average 38s. 10d. per head of the population, or nearly

¹ This permanent committee is appointed by the Provincial Council from among its members, and charged with practically all the administrative business of local government. Among its duties is the supervision of municipal administration and finance.

twice as much as in Belgium. They vary from 29s. 9d. in Portsmouth to 51s. 9d. in Manchester.¹

In Belgium, in 1905, while about eleven millions of the national income for public purposes was derived from taxation, about one and a quarter millions came from other sources; among them the post-office, showing a net profit of £266,000; and revenue from landed property and tolls, bringing in £463,000.

In the case of the provinces, the receipts apart from taxation are only about £159,000. With the communes, however, it is different. Common lands bring in £683,000, trading enterprises £78,000, and "miscellaneous" receipts amount to two and a half million pounds. These are very varied in character. For instance, to take at random a single town (Mons, 1907), we find that under the heading "miscellaneous" are included such items as—

- Payment for seats to view the public fêtes.
- Rents paid by menageries, circuses, etc., for "stands" at fairs.
- Payments for services of fire brigade.
- Repayment by *hospices* for coffins supplied.
- Sale of land.
- Sale of electoral lists, etc., etc.

¹ Table showing the population, rateable value, and rates levied in the following towns for the year 1905-6 :—

Name.	Population.	Rateable Value.	Rates in the £.		Per Head of Population.	
			s.	d.	s.	d.
Liverpool	730,143	4,470,837	7	8	47	3
Manchester	631,185	4,083,119	8	0	51	9
Leeds	456,787	2,075,905	8	8	39	4
Sheffield	440,414	1,689,994	9	0	34	6
Bristol	358,515	1,769,854	7	10	38	8
Bradford	285,589	1,538,870	8	4	44	10
Newcastle	264,511	1,614,097	5	8	34	7
Kingston-upon-Hull	258,127	1,160,820	7	10	35	5
Nottingham	251,677	1,191,517	7	6	35	3
Salford	231,514	1,023,499	7	10	34	6
Leicester	228,132	1,070,828	7	4	34	6
Portsmouth	201,976	965,311	6	4	29	9
Average of the twelve towns					38	10

A glance at the table on page 592 will show that the communes are borrowing large sums of money. In 1905 they borrowed over three and a quarter million pounds, which was more than the whole amount of the taxes they levied in that year.¹

Let us now turn to the question of expenditure, and see what Belgium does with the money she raises. Over a third of it (38 per cent) goes for three purposes, viz. 5 per cent for public works, 16 per cent for war, and 17 per cent for education. The development of agriculture claims 1·2 per cent, and 3·5 per cent is spent in subsidies to Friendly Societies and for kindred purposes.² The loss on the railway amounts to 1 per cent³ and the cost of the poor law to 4 per cent.

It is to be regretted that these figures cannot be compared with figures similarly arranged, giving the income and expenditure of other European countries. This, however, is impossible, as the accounts of each country are drawn up differently, and it would require not only a great deal of labour but much technical knowledge so to rearrange them as to make them comparable. Without such rearrangement, however, any comparisons made between them are likely to be extremely misleading. But with the help of the British Treasury officials, the writer has been able to rearrange the figures of the income and expenditure of the United Kingdom so as to show clearly its net income from various sources and the net expenditure devoted to various purposes. He has also prepared a statement of local income and expenditure in England and Wales, Scotland, and Ireland. This proved to be a difficult task, as the methods of presenting the figures differ, and there is no central office

¹ Unfortunately the method adopted in keeping the Belgian communal accounts makes it impossible to distinguish between expenditure defrayed out of loans and that defrayed out of the yearly income. It is, however, known that loans are only devoted to certain classes of expenditure, viz. public works, roads and bridges, and school buildings.

² These subsidies are used, almost exclusively, for pensions to aged persons.

³ As explained in the chapter on railways (pp. 287-8), the annual accounts, as published, show a profit, but if the share of the public debt charges due to loans incurred on their behalf is debited to them, they show a loss.

where information regarding all three can be obtained. It could not have been accomplished at all but for the help of the officials in London, Edinburgh, and Dublin, who kindly discussed with the writer's secretary the various difficulties which presented themselves. The local figures can only be regarded as roughly accurate, for the accounts are kept in such a way that it is impossible, without very elaborate investigations in the case of every locality, to ascertain with accuracy what is the actual profit or loss on the various trading enterprises. The figures in the table on page 332 are arrived at by deducting from the total income of the trading enterprises the total expenses, and also the interest on the capital invested in them, and the Sinking Fund. As the repayment of capital sums is spread over a comparatively small number of years, it may be taken that the actual profits on the trading enterprises are somewhat greater than is shown in the figures, but, as stated, it would be impossible, without a very lengthy investigation, to say how much greater. The resultant figures, given in the table on page 332, differ in many respects from those usually published; for instance, almost all the national debt charges are debited to war,¹ and many items of income and expenditure have been reclassified to make the figures comparable with those for Belgium. The latter, it will be remembered, were also specially arranged by the writer to show, as clearly as possible, the exact sources of income and of expenditure. In the case of all trading enterprises, such as the post-office, tramways, lighting, etc., only net figures, *i.e.* surplus of income over expenditure, or *vice versa*, have been taken account of.

Some interesting facts emerge from a comparison of the Belgian and British figures. (See table, page 335.) The total income is nearly twice as high per head of the population in the United Kingdom, *viz.* 97s. 2d. against 54s. 5d., but whereas Belgium gets 13s. 3d. per head from sources other

¹ The whole of the national debt was incurred for war, except ten million pounds for the post-office. No interest is debited to the latter in the published accounts, but a debit has been made in the table given in this chapter.

INCOME.

Sources of Income.	National.	Local.				Grand Total.
		England and Wales.	Scotland.	Ireland.	Total.	
	£	£	£	£	£	£
Direct Taxes	51,348,789 ¹	....	....	....	....	51,348,789
Customs	34,734,573 ²	....	....	....	....	34,734,573
Excise	35,602,851 ³	....	....	....	....	35,602,851
Rates . . . . .	....	57,503,030	5,723,802 ⁶	3,020,218	66,337,050	66,337,050
Registration, Fee Stamps, Fees, Fines, and Licences	9,164,000	815,958 ⁵	....	106,544	922,502	10,086,502
Total of Taxes	130,850,213	58,408,988	5,723,802	3,126,782	67,259,552	188,109,765
Post Office	4,091,962	....	....	....	....	4,091,962
Revenue from Public Property .	457,064 ⁴	3,052,885	....	194,384	3,247,269	3,704,333
Suez Canal Shares	1,053,323	....	....	....	....	1,053,323
Tolls . . . . .	....	Loss: 285,111	....	411,090	125,979	125,979
Profits on Trading Enterprises .	....	522,219	Loss: 28,199	....⁷	494,020	494,020
Miscellaneous	575,252	1,642,622	815,706	324,899	2,283,167	2,858,419
Total of other receipts	6,177,601	4,932,615	287,507	930,313	6,150,435	12,328,086
Total	137,027,814⁸	63,341,603	6,011,309	4,057,075	73,409,987	210,437,801
Percentage of Total	65·2	30·1	2·8	1·9	34·8	100

¹ Includes £596,809 paid to Local Authorities in lieu of Rates on Government Property, and £1,158,767 paid to Local Taxation Account from the Consolidated Fund.

² Includes £4,358,789 paid to Local Taxation Account.

³ Includes £289,924 paid to the Isle of Man, and £169,648 paid to Local Taxation Account.

⁴ Includes £5,372,851 paid to Local Taxation Account.

⁵ Crown Lands.

⁶ Includes £222,188, being fees received for higher and elementary Education.

⁷ Water Rates, to the amount of £336,316, have been included in the Receipts of Trading Enterprises.

⁸ The Irish accounts (until 1907-8) were so kept that it was impossible to separate the figures for Trading Enterprises from those under the general heading "Miscellaneous," but this will not vitally affect the table, as the total sums involved are small.

⁹ Includes £27,648,150 in respect of Debt Charges, and £233,720 in respect of Military and Naval Annuities and Pensions.

¹⁰ Includes £216,117 in respect of Superannuation and Retired Allowances, £194,293 for Salaries and Expenses of Local Government Board, £180,202 for Houses of Parliament Offices, and various sums for Salaries of Treasury, Paymaster-General, Registrar-General, Exchequer and Home Offices.

¹¹ Includes £17,040 for Augmentation of Stipends to Scotch Clergy; £1372 as Salaries of the Ecclesiastical Establishment in the West Indies; £5100 as Salaries to the High Commissioner, Preachers, and Officers of the Church of Scotland; and £2138 as Salaries and Expenses of the Ecclesiastical Discipline Commission and of the Scottish Churches Commissioners.

¹² Includes £59,514 for payments under the Tramways and Public Companies' Act, the Light Railways, Tramways, Railways, and Marine Works Acts in Ireland, £2886 as annuities paid under the Light Railway Act, and £3697 as Salaries and Expenses to the Light Railway Commission.

KINGDOM (1905-1906)

EXPENDITURE.						
Items of Expenditure.	National.	Local.				Grand Total.
		England and Wales.	Scotland.	Ireland.	Total.	
		£	£	£	£	
Civil List, Political and other Pensions (House of Lords, House of Commons)	694,875	....	....	....	....	694,875
War	90,382,757 ⁸	....	....	....	....	90,382,757
Colonial Service	1,342,407	....	....	....	....	1,342,407
Foreign Office, Consular and Diplomatic Services	818,835	....	....	....	....	818,835
Agriculture and Fisheries	664,022	....	....	....	....	664,022
Cost of Collection and Administration of Customs and Inland Revenue	8,289,552	....	....	....	....	8,289,552
Internal Administration of the Country	1,002,089 ⁹	4,176,758 ¹⁷	88,848	112,896	4,378,502	5,380,591
Education (including Science and Arts)	2,441,146 } 14,078,641* }	11,622,180 } (12,278,798)† }	1,192,431 } (1,624,756)† }	114,771 ²⁰ } (175,087)† }	12,929,382 } (17,078,641)† }	29,449,169 } (31,757,800)† }
Law (including Law Pensions)	1,525,431 } 2,528* }	784,126 } }	13,663 } (2,528)† }	44,845 } }	842,634 } }	2,370,593 } 2,528 }
Religion	25,650 ¹⁰	....	....	....	....	25,650
Friendly Societies	161,821	....	....	....	....	161,821
Labour Department	168,081	....	....	....	....	168,081
Railways	70,263 ¹¹	....	....	....	....	70,263
Commerce	362,011 ¹²	....	....	....	....	362,011
Poor Law and Charity Commission	132,306 } 1,449,267* }	10,011,972 } (1,020,772)† }	1,341,987 } (19,217)† }	2,018,136 } (409,275)† }	13,372,095 } (1,469,267)† }	14,953,668 } (1,608,542)† }
Prisons and Police	2,489,981 } 2,708,256* }	3,521,876 } (2,516,070)† }	391,457 } (192,186)† }	24,505 } }	3,937,838 } (2,708,256)† }	9,136,075 } (10,844,332)† }
Industrial Schools and Labour Colonies	350,039	....	33,097	45,829	78,926	428,965
Public Works	797,952 ¹³ } 12,095* }	8,491,884 ¹⁸ } }	932,443 } (12,095)† }	450,206 } }	9,374,533 } (12,095)† }	10,684,578 } (12,095)† }
Public Health	91,679 ¹⁴ } 197,161* }	2,194,854 ¹⁹ } (162,152)† }	172,811 } (15,009)† }	.... } .... }	2,367,665 } (15,009)† }	2,656,505 } (15,009)† }
Hospitals and Lunatic Asylums	46,434 } 993,554* }	4,070,087 } (873,193)† }	312,030 } (115,361)† }	35,771 } }	4,417,888 } (115,361)† }	5,457,878 } (115,361)† }
Roads and Bridges	46,434 } 159,633* }	14,688,491 } }	970,291 } (47,193)† }	993,812 } (112,430)† }	16,652,594 } (112,430)† }	18,812,277 } (112,430)† }
Interest and Sinking Fund on Loans	....	....	....	447,236 ²¹	447,236	447,236
Miscellaneous	839,462 ¹⁵ } 4,306,352* ¹⁶ }	3,684,059 } (2,994,402)† }	238,272 } (540,152)† }	1,030,255 } (771,793)† }	5,002,586 } (1,801,945)† }	10,148,400 } (11,940,347)† }
Total	131,603,738	63,246,377	5,737,330	5,318,262	74,301,969	205,905,707
Percentage of Total	64.0	31.0	2.5	2.5	36.0	100

¹² Includes £110,641 as Salaries and Expenses of Committee of the Privy Council for Trade, £35,455 as Salaries and Expenses of the Patent Office, and £28,514 as Salaries and Expenses of the Mercantile Marine Services.

¹³ Represents that portion of expenditure on public works which cannot be allocated to other accounts. It includes £104,390 for Royal Parks and Pleasure Gardens, £72,534 for Salaries and Expenses of the Office of Works in Great Britain, and £38,355 for Salaries and Expenses of the Public Works Office in Ireland.

¹⁴ Includes £2586 for Vaccine Station of Hendon, £3036 for Sanitary Improvements in Public Offices, £5728 as Salaries and Expenses of the Sewage Disposal Commission, £2946 as Salaries and Expenses for the Tuberculosis Commission, £25,061 as Salaries and Expenses of the Medical Department of the Board of Trade, £6833 as Salaries and Expenses of the Inspection of Alkali, etc., Works, and £25,344 as Contributions to Certified Incubate Reformatories.

¹⁵ Includes £841,804 for Stationery, Printing, Paper, and Books for the Public Service.

¹⁶ Grants made to Local Authorities in relief of Rates generally.

¹⁷ Includes £3,538,495 as Salaries and Superannuation Allowances, the remainder being for Registration of Electors, Valuation, and Election Expenses.

¹⁸ Includes £2,016,995 for Removal of House Refuse.

¹⁹ Includes £33,375 paid to Agricultural and Technical Instruction Committees, and £73,507 for Technical Instruction.

²⁰ Includes £33,375 paid to Agricultural and Technical Instruction Committees, and £73,507 for Technical Instruction.

²¹ In the year under review the accounts do not show for what purposes the loans were raised, but the greater part of them were applied to the maintenance of roads, gas, and electric lighting services, and waterworks.

* Subsidy from National Exchequer to local accounts.

† Subsidy from National Exchequer. The amount is shown here, but is not included in the total amount of local expenditure.

than taxation, the United Kingdom only gets 5s. 7d., so that its burden of taxation is more than twice as heavy—91s. 7d. against 41s. 2d. in Belgium. The United Kingdom gets 23s. 9d. per head from direct national taxes, while Belgium gets 9s. 2d., and British customs and excise yield 32s. 6d. per head, as compared with 15s. 9d. in Belgium. But the most striking difference is in the local taxation, which is nearly four times as high in the United Kingdom—30s. 8d. against 8s. 6d. On the whole, we see that so far as the burden of taxation is concerned, the Belgian is let off very lightly compared with the Briton. Now let us see what each gets for his money.

To avoid confusion we will consider only a few of the main figures. The war taxation is more than four and a half times as heavy in the United Kingdom as in Belgium, viz. 41s. 10d. against 9s. 2d.;¹ 44 per cent of British expenditure being for army and navy and past wars, as compared with 17 per cent in Belgium. Apart from war expenditure, the national expenditure is very much the same in the United Kingdom and in Belgium, viz. 53s. 2d.

¹ Belgium has not engaged in war since 1832, and therefore has not the heavy charges for past wars which burden the exchequers of the large powers. The following table shows the amount of the national debt in Belgium and the United Kingdom at different dates; that of Belgium has been largely incurred for the construction of railways, canals, and public works of lasting benefit, whereas that of the United Kingdom is, with the exception of ten millions, for past wars, armaments, and other unproductive purposes.

Year.	United Kingdom. ^(a)	BELGIUM. ^(b)	Amount per Head of Population.					
			United Kingdom.			BELGIUM.		
	£	£	£	s.	d.	£	s.	d.
1880	733,602,040	56,912,560	21	0	0	10	6	0
1890	683,379,358	80,721,720	18	2	0	13	6	0
1900	613,739,471	108,341,960	14	16	0	16	3	6
1907	743,095,841	136,625,240	16	17	0	18	13	6

^(a) Financial Reform Almanack, 1909.

^(b) *Annuaire statistique*, 1908.

COMPARATIVE TABLE OF THE FINANCES (NATIONAL AND LOCAL COMBINED) OF THE UNITED KINGDOM AND OF BELGIUM (1905¹)

Sources of Income.	INCOME.				EXPENDITURE.						
	United Kingdom.	Belgium.	Percentage of Total Income.		Items of Expenditure.	Percentage of Total Expenditure.		Per Head of Population.			
			U.K.	B.		U.K.	B.	U.K.	B.		
Taxes (direct)	£ 51,848,789	£ 3,392,800	24.34	17.33	Civil List, Political and other Pensions	£ 664,375	£ 241,660	.35	1.24	1/3	7/8
Customs	34,734,573	2,082,380	16.49	10.61	War	90,382,757	3,282,980	43.85	16.82	41/10	9/2
Excise	35,802,851	8,540,380	16.03	18.10	F. O. Consular and Diplomatic Service	1,342,407	..	.66	..	7/4	..
Rates	66,337,050	3,057,840	31.51	15.65	Agriculture	818,885	183,520	.41	.94	7/4	7/6
Registration, Fee Stamps and Stamp Duties, Fees, Fines, and Licences	10,088,502	2,788,440	4.81	14.25	Cost of Collection and Administration of Customs and Inland Revenue	664,022	285,840	.32	1.21	7/3	7/8
Total of Taxes	188,109,765	14,761,600	94.08	75.92	Internal Administration of the Country	5,880,591	1,510,120	2.62	7.74	2/6	4/3
Profit on Post Office and Telegraph	4,091,962	205,520	1.95	1.32	Education (including Science and Arts)	29,449,169	3,172,240 ²	14.27	16.26	19/8	8/10
Revenue from Public Property	8,704,393	856,940	1.76	4.35	Law (including Law pensions)	2,970,593	511,040	1.16	2.62	1/1	1/5
Suez Canal Shares	1,053,323	..	.50	..	Religion	25,650	345,880	.01	1.77	..	1/11
Tolls and Dues (Markets, Canals, Quays, Ports, etc.)	125,979	292,000	.08	1.46	Friendly Societies	161,821	691,520	.08	3.55	7/1	1/11
Profit on Trading Enterprises	494,020	78,070	.25	0.36	Labour Department	108,081	271,840	.08	1.39	7/1	7/9
Miscellaneous	2,858,419	3,236,400	1.38	16.59	Railways	70,263	170,600	.03	.88	..	7/6
Total of other receipts	12,328,038	4,728,830	5.92	24.08	Commerce	382,011	..	.18	..	7/2	..
					Poor Law	14,953,663	787,480	7.28	4.04	6/11	2/2
					Prisons and Police	9,136,075	220,560	4.44	1.14	4/3	7/7
					Industrial Schools and Labour Colonies	428,965	227,720	.21	1.17	7/2	7/8
					Public Works	10,694,578	923,360	5.19	4.73	5/7	2/7
					Public Health	2,656,505	454,400	1.30	2.32	1/2	1/3
					Hospitals and Lunatic Asylums	5,457,876	..	2.65	..	2/6	..
					Roads and Bridges	16,812,277	1,865,280	8.16	9.60	7/10	5/4
					Interest and Sinking Fund on Loans	447,286	2,088,920	.22	10.73	7/2	5/10
					Miscellaneous	10,148,400	1,427,020	4.91	7.34	4/8	4/7
Grand Total	210,437,801	19,490,530	100	100	Grand Total	205,905,707	19,494,500	100	100	95/100	54/56

¹ Various notes necessary fully to understand the figures in this table, having been given on pp. 332-3, are not repeated here.
² Part of the cost of buildings is included in "Public Works."
³ Included in "Labour Department."
⁴ Included in "Poor Law," and largely paid for by private charity.

in the former, and 45s. 4d. in the latter. The United Kingdom spends 13s. 8d. per head on education, less than a third of what she spends on war, while Belgium spends 8s. 10d. per head on education, or almost exactly as much as on war. Other large items of expenditure which may be compared are Public Works, and Roads and Bridges, which taken together amount to 12s. 10d. in the United Kingdom, against 7s. 11d. in Belgium, and Poor Law 6s. 11d. in the United Kingdom, or more than three times the Belgian expenditure (2s. 2d.). The reasons for this striking contrast are dealt with at length in Chapter XXX. They include the fact that much of the Belgian poor law expenditure is defrayed from endowments and other private sources. Among the smaller figures it may be noted that Belgium spends 1s. 11d. per head in subsidising Friendly Societies and for kindred purposes, while the United Kingdom only spends 1d. in connection with the Friendly Society movement, and she spends 8d. a head in the encouragement of agriculture as compared with 3d. in the United Kingdom, and undoubtedly gets good value for her money.

We may now draw our general conclusions from what has been said in this chapter.

Considering the Belgian system of taxation as a whole, it must be admitted that it is one which hampers enterprise in many ways. The land tax, based as it is on a now obsolete assessment, neither ensures that land shall be put to its best use nor secures for the community the rapidly growing increments in its value.¹ Moreover, by taxing buildings as well as land, it tends to discourage building enterprise. The high registration duty on land transfer is a check to free and easy sale: the tax on the rental value of houses has all the vices of the system of rates in Britain, with the important difference that practically all workmen's

¹ As pointed out in footnote 1, p. 325, land in Belgium is, generally speaking, put to its best use. This is not due, as shown above, to any system of taxation, but to the fact that it is so widely distributed among men who cannot afford either to hold it very long for a rise, or to devote large tracts merely to their own pleasure.

dwellings are exempted from it; and the "tax on fresh air" (windows and doors) is one which it is impossible to defend. The tax on trading and professions (*droit de patente*) cannot but tend to check their development—it is a tax on income before it is earned. The customs duties are small and are not levied on the food-stuffs of the poor, and their probable effect, which can only be limited in extent and is the subject of hot controversy, need not be discussed at present. The Belgian Labour Party disapproves of the protective duties. Not all the taxes are open to criticism, *e.g.* those on carriage-horses and servants, graduated according to the number kept, are taxes on luxury, while the excise duties on alcoholic drinks, although very low compared with those imposed in Britain, increase their price and thus tend to diminish their consumption. On the whole, the taxes weigh especially upon the middle classes—those engaged in industry, commerce, and agriculture,—while the workman pays on most of the manufactured goods which he buys. The wealthiest classes are let off most easily. There is no tax on their incomes as in Britain, and succession duties, although differentiated according to the relationship of the heirs to the deceased, are not graduated according to the size of the estate. Moreover, in the case of succession in direct line they are levied only on landed property.

Turning to expenditure, Belgium is to be congratulated on a comparatively low bill for war, but it is to be regretted that she spends so little on education—8s. 10d. per head of the population as compared with 13s. 8d. in the United Kingdom. The maintenance of the poor weighs lightly on the public purse, both because much of the cost is met in other ways, and because here, as elsewhere, the cost of administration is low, owing to the low wages.

A comparison of Belgian and British finance shows that the expenditure per head of the population is almost 50 per cent greater in the United Kingdom, but if the war expenditure were the same per head of the population in the two countries, the per capita expenditure would be

almost identical. Taking into account the greater wealth of Britain and the higher wages paid, the *burden* of taxation would then be much lighter in this country. Even now it is doubtful whether Belgians or Britons are the more heavily taxed in proportion to their ability to pay.

PART V
THE STANDARD OF LIFE

CHAPTER XXIII

THE GENERAL STANDARD OF COMFORT

BEFORE going further, it is essential to form some idea of the standard of comfort among the working people of Belgium. It is always difficult to gauge this accurately in any country. It does not admit of measurement based upon accurate statistics, for so much depends upon national tastes and customs that what is looked upon as a hardship in one country is often the direct choice of another. The writer has, however, investigated the problem, and in the present chapter a number of typical working-class households are described in some detail, with a view to showing just how the Belgian workman lives, and answering the following questions. Is there under-feeding among families with small incomes, and if so, to what extent? How much nutriment does the Belgian workman obtain for a given sum of money? What proportion of the total outlay is devoted to food, rent, and other items of household expenditure? What is the cost in Belgium of the chief necessaries of life? And lastly, how, in each of these respects does Belgium compare with Britain?

Setting aside a number which were of doubtful accuracy, the writer has been able to obtain seventy dependable working-class budgets—54 from towns and 16 from the country. They were collected between November 1906 and August 1908 in different parts of Belgium. The majority were obtained through an investigator who had wide experience in work of this kind, and who realised the great care needed to assure satisfactory results. With

four exceptions, all the budgets were kept for four weeks. The method employed was to furnish each housewife with a specially ruled notebook of fourteen pages—two for every day of the week. On the left-hand page she was requested to give particulars of all goods purchased during the day; on the right-hand page to give the menus of all the meals eaten, with the number of persons present. At the beginning and end of the month entries were made of any stock of food in the house.¹ Great care was taken to ensure accuracy, the investigator paying periodical visits for this purpose, which varied in frequency according to the special case, as some housewives recognised much more clearly than others the need to be exact. No budget has been made use of in this chapter which for any reason was suspected to be at all inaccurate.

Having thus ascertained the exact quantity and character of the food consumed by each family, the next step was to see how far this supplied the nutriment considered by physiological experts to be necessary for the maintenance of physical efficiency. The nutrients contained in food fall under three heads:—

Protein—which replaces waste tissue.	} All serve as fuel and pro- duce energy.
Fats—which may be transformed into body-fat but not into muscle.	
Carbohydrates, <i>i.e.</i> sugar and starches—which may be transformed into fat.	

Since all three nutrients produce energy, it is evident that in one sense the food value of any diet may be expressed in terms of the total energy which it is capable of yielding. This energy is usually measured in calories, a calorie being the amount of heat required to raise 1 kilogram of water 1° Centigrade (or 1 lb. of water 4° Fahr.).² But in estimating the adequacy of a diet for practical purposes, it is not enough to know its total energy value; another factor has to be considered.

¹ A specimen page from a notebook is given in Appendix XIX.

² Taking our common food materials as they are used in ordinary diet,

The only nutrient which can repair the constant waste going on in the muscles and various tissues of the body is protein, and consequently a sufficient supply of this must be present in the diet. It is obvious that the greater the muscular work to be done, the greater will be the amount of protein required; but when a sufficient quantity has been secured for the repair of waste, it is a matter of indifference, within limits, whether the additional energy needed is derived from further protein, or from fat or carbohydrates.¹

Physiologists disagree somewhat as to the number of grams of protein and the number of calories of fuel energy necessary for the maintenance of physical efficiency; and it would obviously be impossible in this volume to give, with any pretence at completeness, the arguments in favour of adopting one or another standard of food requirements.

In a previous volume² the writer stated the reasons which led him, after a careful examination of the different standards of food requirements specified by physiologists, to adopt that of Professor Atwater, and he proposes to adopt the same standard in the present volume.³ Professor

the following general estimate has been made for the energy furnished to the body by 1 gram or 1 lb. of each of the classes of nutrients:—

PROTEIN,	fuel value,	4 calories per gram, or 1820 calories per lb.			
Fats,	,	8·9	„	„	4040 „ „
Carbohydrates,	„	4	„	„	1820 „ „

These estimates are based on the latest and most reliable research and take into account only the material which is digested and oxidised so that its energy is actually available in the body. Earlier estimates based on less accurate data and not making allowance for the amounts of fats and carbohydrates which escape oxidation in the body, give 4·1 calories per gram for protein and for carbohydrates, 9·3 calories per gram for fats.

(Revised edition of Atwater's *Principles of Nutrition and Nutritive Value of Food*, published 1902.)

¹ “ It is generally found that when the amount of carbohydrates exceeds about 500 or 600 grams (*i.e.* 18 or 21 oz.) per man per day the digestive organs begin to be disturbed.”

See *A Study of the Diet of the Labouring Classes in Edinburgh* (Otto Schulze and Co., Edinburgh), p. 9.

² *Poverty: A Study of Town Life* (Macmillan).

³ The recent work of Professor Chittenden of Yale, if it is fully confirmed by physiologists, will lead to the adoption of a lower standard of protein. His experiments, however, appear to controvert the general experience of

Atwater's standards are based upon very extensive observation, and while we recognise that future research may modify his estimates, they appear to be the best substantiated and the most trustworthy at the present time.

The amount of food which a man requires of course varies with the severity of the work to be done. The following is Atwater's table showing the food requirements of men doing work of varying severity:—

	Grams of Protein required daily.	Calories of Energy required daily.
Man without muscular work . . .	100	2700
Man with light work	112	3000
Man with moderate work . . .	125	3500
Man with severe work	150	4500

These are, of course, average figures, based upon observations of a large number of persons. The exact food requirements vary from person to person according to body weight and personal idiosyncrasies. Moreover, there is no absolute standard by which to measure the severity of work, but a careful consideration of the work done by the families under observation in Belgium has convinced the writer that it must at least be classed as "moderate," not only that of the men, but also that of the women, who are occupied for long hours every day in housework which involves much hard manual labour, such as scrubbing floors and washing. As for the children, their active habits and rapid growth make considerable demands upon their muscular tissues.

Accordingly, the diet required for a man at "moderate" muscular work, viz. 125 grams (or about $4\frac{1}{2}$ oz.) of protein

mankind. They were carried out on selected groups of men living well-ordered lives under uniform conditions. Most of the experiments were continued for a few months. It would be unwise at present to assume that the lower intake of protein would give equally favourable results over a course of years, or that Professor Chittenden's suggested standard could be applied to people living under average conditions.

and 3500 calories of energy value, has been adopted as the standard by which the adequacy of each of the diets examined has been tested.

The dietary requirements of women and children may be stated as follows:—

Woman, equivalent to 0·8 of a man at moderate work.			
Boy, 14 to 16	„	0·8	„ „
Girl, 14 to 16	„	0·7	„ „
Child, 10 to 13	„	0·6	„ „
„ 6 to 9	„	0·5	„ „
„ 2 to 5	„	0·4	„ „
„ under 2	„	0·3	„ „

In order to compare the various diets with the standard, it was necessary to ascertain the proportion of protein, fat, and carbohydrates contained in each. The food values of such foods as are in common use both in Belgium and English-speaking countries were derived chiefly from tables of American Food-Stuffs published by Atwater and Bryant,¹ while those of foods peculiar to Belgium were obtained from analyses undertaken by the Solvay Institute in Brussels. In a few cases it was necessary to make special analyses. A complete list of the figures and the sources of analyses will be found in Appendix XX. p. 594.

The food consumed in each household has been taken as equivalent to that purchased, allowance being made, as stated above, for any stock on hand at the beginning of the period or remaining over at the end. No allowance has been made for unnecessary waste; it is hardly probable that an appreciable amount is lost by the thrifty Belgian housewife.²

For the purpose of comparison each of the family diets was reduced to a common basis, namely, the diet provided *per man per day*, allowance being made for the different

¹ Bulletin 28, Revised Edition, U.S. Department of Agriculture, 1899. Bulletin 142, Revised Edition, U.S. Department of Agriculture, 1902.

² In a study of the diet of the labouring classes in Edinburgh, made in 1900, the average percentage of the edible portion of the food wasted by fifteen families was only 1·5 per cent of the food purchased. See *A Study of the Diet of the Labouring Classes in Edinburgh* (Otto Schulze and Co., Edinburgh).

food requirements of men, women, and children of various ages, in accordance with the table on p. 345. Corrections were also made for meals taken outside the house, or meals provided for visitors. In the latter respect the agricultural budgets required considerable adjustment. It often happened that a man or a woman worker came in for the day and received food as part of the day's pay, and on exceptional occasions ten or twenty day labourers, employed to help in some heavy piece of farm work, had to be fed.

We must now turn to a detailed criticism of the information gathered. For this purpose the budgets will be divided into four classes: Class I., containing 15 families, with weekly earnings of less than 16s. 8d.; Class II., 17 families, with weekly earnings of between 16s. 8d. and 25s. 9d.; Class III., 21 families, with weekly incomes of over 25s. 9d.; and Class IV., 16 families, living in the country and engaged mainly in agriculture.

This method of classification has been chosen in preference to one depending on the *per capita* income (*i.e.* taking into account the number of persons in the family), because the purpose of study is primarily social rather than physiological. But the writer recognises that a man with, say, sixteen shillings a week and one child is better off than one having, say, twenty shillings and four children, although the former would be in Class I. and the latter in Class II. The method of classification adopted will, however, show what is the actual condition of life of groups of families having incomes of different amounts.

TYPICAL STUDIES IN CLASS I.

(Total weekly income under 16s. 8d.)

15 families.

Average family income 14s. 6½d.

The families investigated in this class are not members of the slum population. They are for the most part the families of hardworking and thrifty unskilled labourers, with young children depending on them.

The fifteen households are distributed as follows:—

Malines . 1	Liége . . 2	Bruges . 2	Lokeren . 2
Ixelles . 1	St. Nicholas . 2	Ghent . 3	Wetteren . 2

The occupations of the heads of the households are:—

Weaver . . . 2	Machinist . . 1	Sabot-maker . . 1
Metal-worker . . 2	Compositor . . 1	Mason . . . 1
Labourers . . . 4	Shoemaker . . 1	Cigar-maker . . 1
Docker 1		

The following descriptions of two households will serve to illustrate the manner of life of the families in this group:—

STUDY NO. 11.—LABOURER, GHENT. WAGES FROM 12s. TO 13s. 8d.
PER WEEK

This labourer's home is in a very old passage, near the centre of the town, and consists of kitchen, bedroom, and mansard. The first thing we note on entering is its scrupulous cleanliness. There is nothing superfluous in the way of furniture; indeed, the whole house only contains a stove, two cupboards, and six chairs, with two beds and a cradle. But family portraits on the walls help to make it look homelike.

The scarcity of furniture is not surprising, for the family is very poor. The father, aged thirty-seven, only earns 2½d. an hour for a week of 62½ hours. The wife used to work at linen-weaving, but had to give up when the last child was born. There are three children, two boys—eight and six—and a baby girl nine months old. They could hardly live, but the wife's sister does her best for them, bringing soup, bread or potatoes every day, and sometimes helping with a little money; once, while the budget was being kept, she gave 1s. 8d. Moreover, the National Society for the Prevention of Tuberculosis just now allows them two pints of milk daily.

Both man and wife are well-informed, having made the most of their opportunities at the communal elementary schools. The eldest boy has been attending an infant school for some months. The father holds advanced views: he is a staunch Socialist propagandist, and often spends his Sundays away from home, selling the Socialist weekly paper *The Future*. For that work he is paid 10d. a Sunday, which he keeps for pocket-money. This suffices him, as he never touches spirits.

The water supply of the whole square is in the centre of it—a pump and a tap, a scanty provision for 124 houses; and the closet accommodation is even worse—sixteen W.C.s, also in the centre.

A study of the dietary of this family reveals a deficiency of 8 per cent in the protein and an excess of 1½ per cent in the energy value.

STATEMENT OF INCOME AND EXPENDITURE FOR 4 WEEKS, MAY 30 TO JUNE 27, 1908.

	s.	d.
INCOME—		
Man's wages (irregular) four weeks	53	0
Gift from sister	1	8
	54	8
EXPENDITURE—		
Food	38	7
Rent (three times 2·25 frs., once 2·50)	7	5
Wooden sabots and nails for leather sabots	0	7
Wool for knitting	0	7
Fuel and light	4	11
Subscriptions to—		
Socialist Club	3½d.	
Burial Club	1½	
Friendly Society	4	
Life Insurance	8½	
Trade Union	11½	
	2	5
Newspapers	0	7
Washing and cleaning materials	1	7
	56	8
Deficit ¹	2	0
	54	8

¹ The Life Insurance, Burial Club, and Trade Union subscriptions were not paid during the last week the budget was kept, and a note was added to the effect that the family was unable to buy necessary clothing and to liquidate the debts incurred during the period the budget was kept.

PURCHASES MADE AND OTHER EXPENDITURE INCURRED DURING WEEK ENDING JUNE 5, 1908.

Sunday.—15 kg. bread, 4·55 frs.; 50 kg. coal, 1·40 frs.; rent, 2·25 frs.; Socialist Club subscription, 10 c.; newspapers, 17 c.; 200 gms. beef for roasting, 60 c.; ½ litre milk, 10 c.; 1½ kg. potatoes, 21 c.; ½ kg. coffee, 50 c.; ½ kg. chicory, 20 c.; ½ kg. butter, 1·25 frs.

Monday.—½ kg. rice, 10 c.; 2½ litres milk, 45 c.; ½ kg. soft sugar, 10 c.; life insurance, 30 c.; ½ kg. black soap, 20 c.; soap powder, 30 c.

Tuesday.—200 gms. beef for roasting, 50 c.; 100 gms. butter, 30 c.; Trade Union, 40 c.; starch, 10 c.; ½ litre milk, 10 c.; ½ litre beer, 10 c.

Wednesday.—½ litre milk, 10 c.; 2 kg. potatoes, 30 c.; 50 gms. lard, 10 c.; 100 gms. butter, 30 c.; 100 gms. jam, 10 c.; spinach, 10 c.; wool for knitting, 10 c.

Thursday.—2 kg. potatoes, 30 c.; vinegar, 3 c.; burial fund, 10 c.; ½ litre milk, 10 c.; Friendly Society, 33 c.; lettuce for salad, 10 c.

Friday.—Lettuce for salad, 10 c.; 1 egg, 10 c.; vinegar, 3 c.; ½ litre milk, 10 c.

Saturday.—130 gms. beef pieces, 30 c.; soup, 15 c.; ½ litre milk, 10 c.; wool for knitting, 16 c.

MENU OF MEALS PROVIDED DURING WEEK ENDING JUNE 5, 1908

	Breakfast.	Lunch.	Dinner.	Tea.	Supper.
Sunday	Bread, butter, coffee.	Bread, butter, coffee.	Potatoes, beef.	Bread, butter, coffee.	Bread, butter, coffee.
Monday	do.	do.	Milk soup (with rice).	do.	do.
Tuesday	do.	do.	Bread and butter, beef and soup.	do.	do.
Wednesday	do.	do.	Mashed potatoes, spinach, dripping.	do.	do.
Thursday	do.	do.	Potatoes, lettuce salad.	do.	do.
Friday	do.	do.	do.	do.	do.
Saturday	do.	do.	Meat pieces, bread and butter, soup.	do.	do.

STUDY No. 6.—A LABOURER, BRUGES, AVERAGE WEEKLY
WAGES 14s. 10d.; NO OTHER INCOME

In old towns, large and small houses, the dwelling-places of rich and poor, are frequently mingled. So it is in Bruges. In a street 25 ft. wide—which is considered broad in that ancient city—we find the modest cottage of this labourer. It is one of a block of five built against the large entrance gate of an old monastery. At the back of the cottages is a strip of garden, 20 or 25 ft. broad, which contains a cherry tree and other fruit trees, and an enclosure for poultry at the far end. The five cottages share two closets and one rain-water barrel, and for drinking-water they are obliged to go to a public pump which serves the whole neighbourhood. As for drainage, there is none at all—indeed, even the gutter does not carry off all the liquid refuse, and in summer the odour which frequently prevails must be prejudicial to the health of the neighbourhood.

This cottage is more home-like than the one previously described. The curtained window and the pots of flowers are signs that care is bestowed on the appearance of the house. The ceiling of the kitchen has been covered with ordinary packing paper to prevent the plaster from falling down. There are four cupboards in the room: one for holding linen, another serving as a larder, another for clothing, and one more for “general purposes.” They are adorned with vases and a few glasses and plates, besides a china statuette of the Virgin. The table is covered with a worn piece of American cloth. The lower part of the walls is papered; the upper whitewashed and decorated with framed pictures. From the kitchen a door opens into a small room used as a bedroom by the grandparents, which contains little furniture save the bed.

The first floor has no ceiling, but consists simply of an attic, which is used as the chief bedroom of the family. A partition wall separates off a small lumber room. There is one bed for the father and mother and a cot for the two children; the baby sleeps with its parents. The clothes are hung on the whitewashed walls.

The family consists of the father, a day labourer aged thirty-four, the mother, aged twenty-nine, a daughter of ten, and two sons aged respectively four years and eight months. The wife's parents live with them.

For the last five months the husband has had regular employment at a factory in Zeebrugge. He has to get up every day at four o'clock and to catch the 5 A.M. train to be at work by six. He takes his dinner with him. Work is over at six, and on his return home he finds a cold meal awaiting him.

The wife worked in a brush factory before she was married, and has since worked for it at home, to augment the family income as best she can. Unfortunately the factory has lately had to reduce its

output and restrict the work given out. The woman seems intelligent and industrious. She is often worried and tired, but never neglects the care of the household, in which she is aided by her mother. This dame is over sixty-five years of age and receives the Government old-age pension of £2:12s. a year. The grandfather is an itinerant fiddler—a profession which is fast dying out in the Flemish provinces.

Of the children, the two oldest go to Catholic schools. The girl makes hardly any progress; the mother had this child before she knew her husband, and he does not care much for it. The baby, who sits almost all day in a chair in the kitchen, is a fat and healthy child and the joy of his parents. All the members of the household are in good health, except the father, who has recently had a slight attack of pneumonia. He is a keen politician and hardly ever misses the Sunday meeting of the local Labour Party. He follows the parliamentary debates most assiduously, reads a weekly political journal, and spends much time in the free library.

A study of the diet of this family reveals a deficiency of 40 per cent in the protein, and of 42 per cent in energy value.

STATEMENT OF INCOME AND EXPENDITURE FOR FOUR WEEKS, OCTOBER 11 TO NOVEMBER 7, 1908.	PURCHASES MADE AND OTHER EXPENDITURE INCURRED DURING WEEK ENDING OCTOBER 17, 1908.
INCOME—	
Man's wages (four weeks)	
£2 19 8	
EXPENDITURE—	
Food (including beverages)	
£2 8 6	
Rent	
0 6 9	
Railway fare	
0 4 8	
Clothing and mending materials	
0 1 2	
Coal, oil, and matches	
0 7 7	
Washing and cleaning materials	
0 1 6	
£3 10 10	
Deficit	
0 11 7	
£2 19 8	
	Sunday. —Railway ticket for the week, 1'45 frs.; 2 kg. bread, 54 c.; $\frac{1}{2}$ litre milk, 12 c.; 125 gms. coffee, 30 c.; $\frac{1}{4}$ kg. spinach, 10 c.; 1 kg. beef, 1 fr.; 1 litre beer, 20c.; 1 kg. butter, 3'25 frs.; $\frac{1}{4}$ kg. chicory, 10 c.; 125 gms. plaice, 10 c.
	Monday. —2 kg. bread, 54 c.; $\frac{1}{2}$ litre milk, 12 c.; 125 gms. coffee, 30 c.; 3 kg. potatoes, 30 c.; 1 kg. 800 gms. plaice, 75 c.; 1 litre oil for burning, 14 c.; 1 kg. soap, 35 c.
	Tuesday. —2 kg. bread, 54 c.; 125 gms. coffee, 30 c.; $\frac{1}{2}$ litre milk, 12 c.; 3 kg. potatoes, 30 c.; 100 gms. Dutch cheese, 15 c.
	Wednesday. —2 kg. bread, 54 c.; 125 gms. coffee, 30 c.; $\frac{1}{2}$ litre milk, 12 c.; 3 kg. potatoes, 30 c.; mussels (about 100), 15 c.; 1 litre oil, 14 c.; 1 kg. soap, 28 c.
	Thursday. —2 kg. bread, 54 c.; $\frac{1}{2}$ litre milk, 12 c.; 125 gms. coffee, 30 c.; 3 kg. potatoes, 30 c.; 3 herrings, 15 c.; 50 kg. coal, 1'25 frs.; 250 gms. chicory, 10 c.
	Friday. —2 kg. potatoes, 30 c.; 2 kg. bread, 54 c.; 125 gms. coffee, 30 c.; $\frac{1}{2}$ litre milk, 12 c.; 12 plaice (about 2 kg.), 90 c.; 1 litre oil, 14 c.
	Saturday. —2 kg. bread, 54 c.; 3 kg. potatoes, 30 c.; 125 gms. coffee, 30 c.; $\frac{1}{2}$ litre milk, 12 c.; wool for mending, 40 c.; 150 gms. Dutch cheese, 30 c.

MENU OF MEALS PROVIDED DURING WEEK ENDING
OCTOBER 17, 1908

	Breakfast for the Man alone at 4.30.	Breakfast 7-8 A.M.	Dinner.	Tea.	Supper.
Sunday .	..	Bread, but- ter, coffee, milk.	Vegetable soup with spinach, bread, and beef.	Bread and butter, coffee with milk.	Bread and butter, fish (plaice.) A glass of beer. "Papp" ¹ for children.
Monday .	Bread, but- ter, coffee with milk.	do.	(a) Bread, but- ter, coffee, milk. (b) Potatoes with sauce.	do.	Bread and butter, coffee with milk, plai ce. "Papp" for the children.
Tuesday .	do.	do.	(a) Fish from Monday. (b) Potatoes with sauce.	do.	Bread, butter, coffee with milk. Pota- toes and fish for the man.
Wednesday	do.	do.	(a) Bread, but- ter, coffee. (b) Potatoes with sauce.	do.	Bread, butter, coffee, milk, m u s s e l s. "Papp" for children.
Thursday .	do.	do.	(a) Bread, her- ring. (b) Potatoes with sauce, herring.	do.	Bread, butter, coffee, milk. Potatoes and sauce for the man.
Friday .	do.	do.	(a) Bread, but- ter, coffee. (b) Potatoes with sauce and plaice.	do.	do.
Saturday .	do.	do.	(a) Bread, but- ter, coffee, milk. (b) Potatoes with sauce.	do.	do.

(a) The man at Zeebrugge.

(b) The rest of the family.

¹ Rice boiled in a good deal of milk and water with sugar added.

THE DIET OF FAMILIES IN CLASS I.

Number of Study.	Locality.	Description of Family.			Average Weekly Income of Family.	Cost of Diet.			Sufficiency		
		Occupation of Head of Household.	Number in Family.			Average Weekly Expenditure on Food.		Expenditure on Food per Man per Day in Pence.	Protein per Man per Day.	Deficiency of Protein per Man per Day. ¹	
			Adults.	Children.		Equivalent to Men.	Amount in Francs.				Percentage of Total Expenditure.
1	Lokeren	Machinist . . .	2	8	5.4	s. d. 16 0	18.0	67.9	4.54	Grms. 90	Grms. 35
2	"	Sabot-maker . . .	2	6	4.4	11 5	10.1	84.4	3.08	107	18
3	Wetteren	Shoemaker . . .	2	4	3.8	13 1	9.4	65.3	4.20	91	34
4	"	Weaver . . .	2	7	4.8	13 7	10.2	73.3	3.88	99	26
5	Bruges	Compositor . . .	2	3	3.2	16 5	9.8	58.9	5.03	109	16
6	"	Labourer . . .	4	3	4.9	14 10	12.3	71.5	4.30	77	48
7	St. Nicolas	Weaver . . .	2	4	3.9	14 2 $\frac{1}{2}$	10.4	69.1	4.44	103	22
8	"	Cigar-maker . . .	2	4	3.4	14 0 $\frac{1}{2}$	10.11 $\frac{1}{2}$	69.8	5.58	103	22
9	Malines	Labourer . . .	3	4	5.3	15 11	12.6 $\frac{1}{2}$	70.1	3.97	88	37
10	Ghent	Docker . . .	2	5	4.0	13 7	11.2 $\frac{1}{2}$	71.9	4.82	103	22
11	"	Labourer . . .	2	3	3.0	13 7 $\frac{1}{2}$	11.3	68.3	6.46	116	9
12	"	" . . .	2	4	3.7	15 4 $\frac{1}{2}$	7.10 $\frac{1}{2}$	53.9	3.55	71	54
13	Ixelles	Mason . . .	2	5	4.1	15 8 $\frac{1}{2}$	10.8 $\frac{1}{2}$	64.0	4.38	82	43
14	Liège	Metal worker . . .	2	1	2.1	15 3 $\frac{1}{2}$	10.8	165.6	8.68	120	5
15	"	" . . .	2	3	3.0	15 1	11.4 $\frac{1}{2}$	71.3	6.33	99	26
Average			2	4	4.0	14 6 $\frac{1}{2}$	10.9	67.0	4.94	97	28

¹ Standard requirements, 125 grams protein.

ADEQUACY OF DIET

Having now gained some idea of the kind of households with which we are dealing, we may proceed to a more detailed examination of the dietary of the families in Class I. An examination of the above table shows that in all but two cases the families are underfed, and even in those two there is a deficiency of protein, although the supply of fuel energy is adequate. Upon the average the families in this class only obtain four-fifths of the nutriment necessary for the maintenance of physical efficiency.¹

¹ The deficiency of protein varies from 4 to 43 per cent of the standard requirements, the average deficiency for the class being 22 $\frac{1}{2}$ per cent. The amount of fuel energy supplied by the dietary also varies greatly, from a deficiency of 45 per cent in one case to a surplus of 22 per cent in another. Upon the average the fifteen budgets show a deficiency of fuel energy amounting to 17 per cent. It is to be noted that in the two cases which show a surplus in the energy value of the dietary, the number of children is small. In one family there is only one child, in the other there are three, the eldest of whom is seventeen years. The former family would show a

XXIII GENERAL STANDARD OF COMFORT 353

(FAMILY INCOME UNDER 16s. 8d.)

of Diet.		Economy of Diet.		Animal and Vegetable Food.							
Energy Value per Man per Day.	Deficiency or Excess of Energy Value per Man per Day. ²	Amount obtained for one Shilling.		Percentage of Protein obtained from		Percentage of Calories obtained from		Percentage of Cost spent in			
		Protein.	Calories.	Animal Food.	Vegetable Food.	Animal Food.	Vegetable Food.	Animal Food.	Vegetable Food.	Alcohol.	Non-Alcoholic Beverages and Condiments.
Cals.	Cals.										
2858	642	237	7551	15.9	84.1	19.8	80.2	36.3	58.3		5.4
3258	242	322	9815	8.9	91.1	13.3	86.7	28.1	67.3		4.6
2833	667	260	8085	29.4	70.6	32.4	67.6	44.7	50.0		5.3
2942	558	252	7238	22.6	77.4	19.5	80.5	44.3	50.0	..	5.7
2636	864	255	6172	37.8	62.1	23.6	76.1	47.5	48.2	1.9	3.4
1919	-1581	215	5853	36.8	63.1	24.2	75.7	43.8	39.8	0.4	16.0
3268	232	278	8822	4.8	95.2	10.1	89.9	28.3	70.0	..	1.7
2985	516	222	6421	24.6	75.4	23.9	76.1	52.7	44.9	..	2.4
2373	-1127	269	7164	27.1	72.9	19.8	80.2	40.3	55.1	..	4.6
3258	-242	256	8114	24.0	74.8	24.1	73.7	50.2	40.3	4.1	5.4
3555	+ 55	216	6613	22.3	77.7	22.9	76.9	28.5	65.3	1.1	5.1
2070	-1430	240	6993	19.9	80.1	19.2	80.8	43.5	49.8	..	6.7
2510	- 990	225	6896	16.3	83.7	19.7	80.1	41.1	55.6	2.9	0.4
4267	+ 767	166	5899	30.0	69.9	23.6	76.4	58.7	37.8	..	3.5
3018	- 482	188	5724	19.6	80.3	21.2	78.6	46.0	51.7	0.3	2.0
2917	583	240	7124	22.7	77.3	21.1	78.9	42.3	52.3	1.0	4.4

² Standard requirements, 3500 calories.

The existence of such a heavy deficiency in the food supply of the thrifty labouring class is so serious a fact, that it is important to discover its cause. Is it due to an uneconomical selection of food-stuffs, or to their high price, or are we forced to the conclusion that although the price of food is moderate and the selection as economical as can reasonably be expected, wages are so low that the food necessary for the maintenance of full physical efficiency cannot be bought? Let us consider the first question.

As the adequacy of the food supply depends not only upon the fuel energy which it is capable of producing, but also upon the amount of protein which it contains, the economy or otherwise of the dietaries will best be seen by an examination of the number of grams of protein and the calories of fuel energy obtained for one shilling. These figures are given in the above table, and show that deficiency if there were the average number of children, the latter will do so when the younger children are a year or two older and require more nutriment.

upon the average the fifteen families obtain 240 grams (8.45 oz.) of protein, and 7124 calories of fuel energy for a shilling. Of course there are great variations. For instance, the sabot-maker in Lokeren, East Flanders (Study No. 2), obtains no less than 322 grams (11.35 oz.) of protein and 9815 calories of fuel energy for every shilling spent on food. His wife is by far the most economical buyer. An examination of the menus of meals showed, however, that the dietary consists very largely of bread and potatoes. The least economical expenditure upon food is found in the case of a metal-worker living in Liège, who only obtains 166 grams (6 oz.) of protein and 5899 calories of fuel value for a shilling, and that of a labourer in Bruges who, although getting 215 grams (7½ oz.) of protein only gets 5353 calories of fuel value in each shilling's worth of food.

As it is well known that vegetable is more economical than animal food, it will be interesting to see what percentage of the total food expenditure is devoted to each of these respectively. The table on p. 353 shows that taking the group of fifteen families as a whole, 42 per cent is spent on the purchase of animal food, but this only provides 23 per cent of the total protein and 21 per cent of the fuel energy. Thus the 52 per cent of expenditure devoted to vegetable food provides 77 per cent of the protein, and 79 per cent of the fuel energy. But although the figures giving the total nutriment purchased for a shilling, and the percentage spent on animal and vegetable food respectively, show that there is room for more economical buying, they also show that even if the buying were as economical as could possibly be expected, the income would still not allow of a dietary adequate to maintain physical efficiency.

EXPENDITURE UPON ALCOHOL

Six families in this class spend money on alcohol, but in two cases it is only a fraction of one per cent of the household expenditure; in the others it amounts to 1, 2, 3, and 4 per cent respectively. It is obvious that in this

matter the families are not typical, for the average expenditure on alcohol per working-class family in Belgium is considerable (see p. 420).

ANALYSIS OF TOTAL EXPENDITURE¹

It is impossible to base, upon budgets kept only for a month, any certain conclusions regarding the proportion of total expenditure devoted to various purposes other than food.

A single heavy expense such as the purchase of a suit of clothes, during the month in which the family was under observation, would make that proportion abnormally high, while if such expenses were deferred, it might be abnormally low. Nevertheless, certain deductions may be drawn from an examination of the total expenditure. The first is that a very large percentage of the income is spent upon food—no less than 67 per cent—leaving only 33 per cent for rent, clothes, and all other items. In six of the fifteen budgets, the expenditure upon food is actually higher than 70 per cent, rising in one case to over 84 per cent. The lowest rate of expenditure was in Study 12, the worst-fed family in the group. But however badly this family treated itself in respect of food, it was extraordinarily thrifty. It saved $5\frac{1}{2}$ per cent of its income of 15s. $4\frac{1}{2}$ d., and in addition repaid debt to the amount of 4 per cent of its expenditure, although it was paying 18 per cent as rent.

These fifteen families paid away on an average $11\frac{3}{4}$ per cent of their expenditure in rent. The highest rate, viz. $24\frac{1}{2}$ per cent, was paid by a mason in Brussels; the lowest by a metal worker in Liège, whose rent only amounted to 6 per cent. In this case, however, the family, consisting of the man, wife and baby, occupied only one room, and that an attic.

Fuel and *light* together absorb about 8 per cent of the expenditure of this group. For reasons already explained, the amounts paid for *clothing* and *boots* show especially great variations. Two families spent nothing at all on clothing during the month; the rest spent sums varying from 1·4

¹ See table on page 356.

PERCENTAGE OF EXPENDITURE DEVOTED TO VARIOUS PURPOSES BY FAMILIES IN CLASS I.¹

Number of Study.	Number in Family.		Average Weekly Income of Family.	Percentage of Total Expenditure devoted to							Excess of Income over Expenditure.	Total Percentage.	Excess of Expenditure over Income.
	Adults.	Children.		Food.	Rent.	Clothing.	Fuel and Lighting.	Insurance and Sick Clubs.	Sundries.	Repayment of Debt.			
1	2	8	s. d. 16 0	67.9	9.4	9.0	6.1	0.8	6.8	...	...	100	Per cent. 16.3
2	2	6	11 5	84.4	6.7	3.5	3.5	...	1.9	...	...	100	4.3
3	2	4	13 1	65.3	9.2	1.4	9.2	11.4	3.5	...	...	100	...
4	2	7	13 7	73.3	12.4	6.3	3.7	...	4.3	...	...	100	2.1
5	2	3	16 5	58.9	13.4	6.7	8.6	5.4	5.7	...	1.3	100	...
6	4	3	14 10	71.5	9.9	1.8	11.2	...	11.6	...	...	100	...
7	2	4	14 2½	69.1	10.7	2.8	8.2	3.1	6.1	...	...	100	5.2
8	2	4	14 0½	69.8	10.2	...	9.0	5.0	1.4	...	4.6	100	...
9	3	4	15 11	70.1	8.9	3.2	14.7	0.5	2.6	...	...	100	11.2
10	2	5	13 7	71.9	7.4	1.7	6.8	...	6.6	...	...	100	13.4
11	2	3	13 7½	68.3	13.1	2.1	8.6	...	4.3	...	...	100	3.5
12	2	4	15 4½	53.9	18.2	7.6	7.0	2.4	1.4	3.9	5.6	100	...
13	2	5	15 8½	64.0	24.5	3.7	5.7	...	2.1	...	...	100	5.6
14	2	1	15 3½	65.6	6.2	7.4	8.8	3.5	8.5	...	...	100	5.5
15	2	3	15 1	71.3	15.0	...	11.4	...	2.3	...	...	100	5.4
Average	2	4	14 6½	67.0	11.7	3.8	8.2	2.2	4.6	0.9	...	100	4.9

¹ All the budgets were kept for four weeks.

to 9 per cent of their total income. The average for the fifteen budgets was 3·8 per cent of the total income.

CLASS II.—*Wages between 16s. 8d. and 25s. 9d.*

Average family income for the class, 21s. 11d.

Of the 17 families in this class, 2 live in Brussels, 5 in Antwerp, 4 in Ghent, 1 in Lokeren (East Flanders), 3 in Liège, and 2 in Jumet (near Charleroi). The last five, therefore, live in the Walloon district of Belgium.

The occupations of the chief wage-earners are as follows : 3 day labourers, 4 metal-workers, 1 docker, 2 cigar-makers, 1 marble polisher, 1 printer, 1 worker in a paper mill, 1 telephone worker, 1 mason's labourer, 1 labourer who also distributes newspapers, 1 inlaid floor worker (*parquetier*).

TYPICAL STUDIES IN CLASS II.

STUDY No. 26.—DAY LABOURER, BRUSSELS. WAGES 14s. 5d. PER WEEK. TOTAL INCOME OF FAMILY 23s. 9½d. PER WEEK

The family occupies a small tenement on the second floor of a lodging-house, situated in what is considered the healthiest suburb of Brussels, although the district is not a particularly attractive one.

The husband is tall and strong, a finely made man, but perhaps too heavily built and somewhat lethargic. He is occupied out of doors in going errands for a shop.

The wife is puny and pale, and although young wears glasses when she is working. Her bad sight is probably due to the fineness of the sewing and embroidery by which she adds to her husband's earnings. She sits over this all day, sending an apprentice to fetch and return work, while her sister-in-law takes the child out. She is too busy to look after household matters, and has not naturally the love of order and comfortable surroundings which is the result of home training, having from her early childhood been left to her own devices. The little boy is pale, but tall and strong for his age ; and though at home he is apt to look grimy ; when met in the street he is extremely spick and span.

The kitchen is a medium-sized room, with two windows hung with muslin curtains and blinds. The wall-paper is dirty and the table is covered with newspaper. The cooking-stove is larger and better than one would expect, probably because it was a wedding present. The furniture is of the ordinary kind ; the little boy has a chair of his own. The usual wall decoration of gaudy chromolithographs is supplemented by a sabre hanging over the door, a souvenir of the

husband's military service. Adjoining the kitchen is a small workroom containing only a large table and dressmaking appliances.

There is a bedroom on the second floor. It is naturally very dark, as the light is obstructed by adjoining houses, and the darkness is accentuated by the fact that the blind is nearly always down. But it is quite handsomely furnished, though this was done at the time of their marriage with borrowed money, which has yet to be repaid. There is a bed, a cradle for the child; an oval table, a looking-glass in a frame of imitation walnut and a highly-ornamented shelf, which does duty as a washstand. As might be expected, the air in the room is impure.

The only sign of intellectual life in this household is the daily newspaper, the *People*, which when it has been read serves as a table-cloth.

An examination of the family's diet shows that the protein is 7 per cent and the fuel value 8 per cent below standard requirements.

STATEMENT OF INCOME AND EXPENDITURE FOR FOUR WEEKS, OCTOBER 21 TO NOVEMBER 3, AND NOVEMBER 11 TO NOVEMBER 24, 1906

INCOME—	
Husband (four weeks' wages at 14s. 5d.)	£2 17 8
Wife (for making fine underlinen)	1 17 6
	£4 15 2
EXPENDITURE—	
Food (including beverages)	£2 4 7
Washing and cleaning materials	0 1 6
Oil	0 2 5
Coal and wood	0 5 4½
Newspaper, 35 c. per week	0 1 1½
Laundress, 1·25 frs. weekly	0 4 0
Thread	0 1 8½
Boots	0 4 9½
Tram	0 4 4
Paid to apprentice	0 2 5
	£3 12 3
Balance ¹	1 2 11
	£4 15 2

¹ This budget was not kept for four consecutive weeks, and it so happens that the rent (16s., paid monthly) did not fall due during any of the weeks when the family was under observation.

PURCHASES DURING WEEK ENDING OCTOBER 27, 1906

Sunday.—1 kg. potatoes, 10 c.; 1 kg. cauliflower, 25 c.; ½ kg. minced beef, 70 c.; 1 kg. bread, 25 c.; ½ kg. pears, 30 c.; ½ kg. cooked pears, 20 c.; ½ kg. butter, 1·70 frs.; ½ kg. coffee, 50 c.; ½ kg. chicory, 24 c.; 1 egg, 12 c.; ½ kg. cooking fat, 40 c.; 1 kg. apples, 30 c.; ½ kg. brown sugar, 9 c.; 1 saveloy¹ and a roll (at a café), 25 c.; 5 litres oil (for burning), 75 c.; 37½ kg. coal, 1·38 frs.; soap and soda, 33 c.; laundress, 1·25 frs.; thread, 54 c.; wood, 30 c.

Monday.—1 kg. bread, 25 c.; ½ kg. "Edam" cheese, 45 c.; 50 gms. pig's head, 10 c.; 200 gms. "sauret," 14 c.;² repairs to boots, 5·50 frs.; shoes for baby, 50 c.; tram, 85 c.

Tuesday.—2 kg. bread, 50 c.; 1 kg. potatoes, 9 c.; 600 gms. endives, 24 c.; 200 gms. pork cutlets, 50 c.; 50 gms. pig's head, 10 c.; tram, 20 c.; 75 gms. "pâté de foie" (made from pig's liver), 15 c.

Wednesday.—1 kg. potatoes, 9 c.; ½ kg. carrots, 8 c.; turnips, 8 c.; 100 gms. endives, 4 c.; ½ kg. scraps of mutton, 70 c.; 50 gms. "Herve" cheese, 10 c.; 2 kg. bread, 50 c.; tram, 20 c.

Thursday.—1 kg. potatoes, 9 c.; 1½ kg. red cabbage, 20 c.; 375 gms. black pudding, 25 c.; ½ kg. apple, 12 c.; 1 kg. bread, 25 c.; 150 gms. "bloempanche,"³ 10 c.; tram, 20 c.

Friday.—1 kg. potatoes, 9 c.; ½ kg. pork cutlets, 50 c.; 1 kg. carrots, 15 c.; 1 kg. bread, 25 c.; 100 gms. "sauret," 10 c.; brass and stove polish, 25 c.; sand-paper, 10 c.; tram, 20 c.

Saturday.—2 kg. bread, 50 c.; 300 gms. "bloempanche," 20 c.; ½ kg. apples, 10 c.; ½ kg. "Herve" cheese, 40 c.; 62 gms. "Brie" cheese, 15 c.; apprentice, 3 frs.; tram, 20 c.

¹ A kind of highly seasoned dry sausage made of salted pork.

² Fish of the herring species, smoked and salted.

³ Sausage made of blood, flour, and bacon fat. A kind of "black pudding."

MENU OF MEALS PROVIDED DURING WEEK ENDING
OCTOBER 27, 1906

	Breakfast.	Dinner.	Tea.	Supper.
Sunday .	Bread, baked pears, coffee. ¹	Meat balls, ² potatoes, cauliflower, pears.	Saveloy and roll, coffee (eaten at a café by the man).	Baked apples, bread, coffee
Monday .	Bread, cheese, coffee.	Bread, cheese, coffee.	Pig's head, bread, coffee.	Herrings, bread, coffee.
Tuesday .	Pig's head, bread, coffee.	Pork cutlets, potatoes, endivea.	Bread, coffee.	<i>Pâté de foie</i> (made from pig's liver), bread, coffee.
Wednesday	Bread, coffee.	"Ragout" of mutton, bread, potatoes, turnips.	do.	Bread, coffee, "Herve" cheese.
Thursday .	do.	"Black pudding," potatoes, red cabbage.	"Black pudding," bread, coffee.	Bread, coffee, remains of red cabbage.
Friday .	do.	Pork cutlets, potatoes, carrots.	Bread, coffee.	Herrings, bread, coffee.
Saturday .	do.	"Black pudding," apples, bread.	...	"Herve" and "Brie" cheese, bread and coffee.

¹ Without milk throughout the menu.

² "*Boulettes de bœuf hachée.*"

STUDY NO. 23.—CIGAR-MAKER, ANTWERP. WAGES 16s. 5d. PER WEEK. TOTAL INCOME OF FAMILY 25s. 2d. PER WEEK

The cigar-maker lives on the ground floor of a cottage, one of a block built by the *Bureau de Bienfaisance* round a small square, in the centre of which is a pump which all the tenants use in common.

He is a man of middle height, muscular and broad shouldered, but pale and far from healthy looking. Still, he is always good-humoured. He has lived for several years in England, and speaks English as fluently as Flemish. Even on Sundays he dresses carelessly, and his wife, who is small, thin, and pale, has as little regard for appearances as her husband. Her hair is never tidy and her clothes are not particularly clean.

There are five children; the eldest, a pleasant-faced girl of sixteen, works in a laundry as ironer. The next, a boy of thirteen, is small for his age, and thin, although he does not look delicate. He is very bright and intelligent, and was entrusted with the entries in the budget books. The other children, aged 11, 9 and 5, are under-sized, with the exception of the youngest; but they are all neat and clean.

The two rooms which, together with an attic, compose the dwelling, open out on either side of a passage, and there is no other communication between them. The kitchen smells of refuse and tobacco; for the husband works here at his trade in the evenings after factory hours, and sometimes on Sundays. The walls are painted with oil paint, which is peeling off in places, and the boarded floor is washed and strewn with white sand, in the Flemish fashion. A large part of the room is taken up by the stove and its long chimney. This, and the saucepans upon it, are kept very clean. There is an oval table, once white, but now covered with stains. The low linen cupboard has evidently been knocked about considerably, and so have the five chairs. A great many household utensils are standing about, and the room would look tidier but for the clothes hanging on cords stretched across it. The walls and shelves are decorated with cheap ornaments, advertisement pictures, a few framed photographs, and an engraving of Our Lady of Lourdes.

The other room is smaller, and is used as a bedroom by the parents. The bedcoverings are dirty, the shutters are always kept closed; so that there is little ventilation; and as the room is damp, the air is stifling. There is a profusion of ornaments, including a large mirror in a gilt frame over the mantle shelf, purchased by the daughter from her savings, some statuettes, china vases, and beer glasses. On a cupboard made of imitation walnut there are a great many small photographs in frames, a coffee service, and an image of St. Joseph, and on the walls are more photographs, and a large clock that does not go.

In addition to these two rooms, the family occupies an attic which, though not large, contains three beds and a table. One of the beds is broken, and the two others, iron and wood respectively, accommodate the five children.

The impression left on the mind of a visitor is that, despite the poverty of the family and the large number of the children, the cottage could be made much more comfortable if the wife were stronger and more orderly.

There is a deficiency of 14 per cent of protein in this family's diet, and of 11 per cent of energy value.

[TABLE

STATEMENT OF INCOME AND EXPENDITURE FOR FOUR WEEKS, JAN. 27 TO FEB. 23, 1907

INCOME—	
Father (cigar-maker), four weeks at 16s. 5d.	£3 5 8
Son (thirteen years, printer), four weeks at 3s. 2½d.	0 12 10
Daughter (sixteen years, laundry hand), four weeks at 5s. 7d.	1 2 4
	£5 0 10
EXPENDITURE—	
Food (including beverages)	£2 17 10
Rent	0 14 5
Sickness and life insurance	0 2 11
Husband's pocket-money	0 3 2
Children's pocket-money	0 2 7
Child's school money	0 0 8½
Washing and cleaning	0 2 4
Coal, wood, oil, and matches	0 7 1½
Tobacco for smoking and chewing	0 1 3½
Household repairs and replacements and repairs to clothes and boots	0 9 7
	£5 1 11½
Deficit ¹	0 1 1½
	£5 0 10

¹ The husband probably paid for his tobacco and other small expenses out of his pocket-money.

PURCHASES AND OTHER EXPENDITURE DURING WEEK ENDING FEBRUARY 2, 1907

Sunday.—Sick and life insurance, 1·07 frs. ; soap, 40 c. ; coal, 1·70 frs. ; husband's pocket-money, 1 fr. ; children's pocket-money, 80 c. ; 21 kg. bread (per week), 5·04 frs. ; ½ kg. tripe, 60 c. ; 17 kg. potatoes, 1·36 frs. ; 1 kg. chicory (for coffee), 40 c. ; ½ kg. coffee, 76 c. ; ½ kg. rice, 15 c. ; ½ kg. suet, 65 c. ; ½ kg. moist sugar, 18 c. ; ½ kg. lump sugar, 36 c. ; ½ kg. vermicelli, 10 c. ; 1 kg. salt, 5 c. ; 1 kg. beef, 1 fr. ; ½ kg. green haricots (pickled), 20 c. ; ½ kg. "speculations," 1 25 c. ; ½ kg. liver sausage, 30 c. ; vegetables for soup, 22 c. ; 1 kg. margarine, 2 frs.

Monday.—½ kg. smoked horse meat, 55 c. ; fir cones (for lighting fires), 30 c. ; 3 litres oil (for burning), 42 c. ; household repairs, 3 frs. ; chewing tobacco, 30 c. ; 100 gms. colza oil, 12 c. ; child's school money, 25 c. ; sand for the floor, 16 c. ; 2½ litres milk (per week), 45 c. ; ½ kg. horse sausage, 50 c.

Tuesday.—Rent, 4·50 frs. ; starch, 10 c. ; washing powder, 10 c. ; 1 kg. horse meat, 70 c. ; ½ kg. onions, 8 c. ; pepper and mustard, 4 c. ; vegetables for soup, 22 c. ; 125 gms. liver sausage, 30 c.

Wednesday.—½ kg. smoked sardines.

Thursday.—½ kg. dry peas, 24 c. ; bone for soup, 10 c. ; 125 gms. Dutch cheese, 25 c. ; ½ kg. leeks, 15 c. ; vinegar, 2 c.

Friday.—½ kg. codfish, 50 c. ; mustard, 2 c. ; 125 gms. *Gruyère* cheese, 30 c.

Saturday.—Vegetables for soup, 22 c. ; ½ kg. horse meat, 35 c. ; ½ kg. horse sausage, 15 c. ; ½ kg. beef liver (cooked), 25 c.

¹ Small fancy biscuits for children.

MENU OF MEALS PROVIDED DURING WEEK ENDING FEBRUARY 2, 1907

	Breakfast.	Dinner.	Tea.	Supper.
Sunday	Tripe, coffee, milk.	Soup, potatoes, soup-meat, pickled haricots.	Coffee, milk, bread, "speculations" (biscuits).	Coffee, milk, liver sausage.
Monday	Smoked horse meat, bread, coffee, milk, sugar.	Soup, potatoes, and remains of Sunday's dinner.	Coffee, milk, sugar, bread, smoked horse meat.	Coffee, milk, bread, horse sausage.
Tuesday	Horse sausage, bread, coffee, milk.	Soup, potatoes, horse meat.	do.	Coffee, milk, bread, liver sausage.
Wednesday	Smoked horse meat, bread, coffee, milk.	Soup, potatoes, remains of Tuesday's dinner.	Coffee, milk, sugar, bread, horse sausage.	Bread, smoked sardines, coffee, milk.
Thursday	do.	Pea-soup, potatoes, vinegar sauce.	Coffee, milk, sugar, bread.	Bread, coffee, milk, Dutch cheese.
Friday	Coffee, sugar, bread.	Codfish, potatoes.	Bread, coffee.	Bread, coffee, <i>Gruyère</i> cheese.
Saturday	Coffee, bread, sausage (horse).	Soup, potatoes, horse meat.	do.	Bread, beef liver, coffee.

STUDY NO. 31.—DAY LABOURER IN JUMET (NEAR CHARLEROI).
WAGES 22s. 10d. PER WEEK

The first glance round, on entering this house—one of a row of workmen's dwellings,—shows that little care has been spent on making it comfortable and homelike. The husband is pale and stunted. A year ago he had an accident, injuring his right hand severely, and since this he has earned a good deal less. But his wife looks bright and healthy, and is sociable, and fond of a neighbourly gossip. There is one child, pale and small, but evidently well-cared for.

The room on the ground floor has the usual kitchen furniture—chairs, table, stove, dresser, and a sewing-machine. On the walls are many glaring advertisement pictures, with a large mirror, and a crucifix. The crockery, and some tins containing provisions, are kept on a row of shelves. The lack of fresh air is atoned for by a permanent smell of cooking.

A steep, straight staircase leads from this living-room to the bedroom, which has a cemented floor, while the kitchen floor is boarded, a reversal of the ordinary custom. There are two beds, a wooden one for the parents and an iron one for the child; and these look clean and neat though everything else in the room has a forlorn air like that of the downstairs region. The ceiling is so cracked that a fall of plaster seems imminent.

There is a mansard on the same floor.

STATEMENT OF INCOME AND EXPENDITURE FOR FOUR WEEKS,
NOVEMBER 4-18, AND DECEMBER
2-16, 1906

INCOME—	
Wages, four weeks at £1:2:9½.	£4 11 2
EXPENDITURE—	
Food (including beverages)	£3 6 0½
Rent	0 8 5
Coal	0 3 0½
Oil and matches	0 1 1½
Soap and cleaning materials	0 1 7
Saucepan for boiling linen	0 3 2
Clothes	0 1 0½
Newspapers	0 0 6
Lamp glass	0 0 1
	£4 5 0
Balance	0 6 2
	£4 11 2

PURCHASES DURING WEEK ENDING
NOVEMBER 11, 1906

Sunday.—½ kg. ham, 35 c.; 2 kg. bread, 45 c.; ½ kg. of butter, 75 c.; 2 kg. potatoes, 20 c.; ½ kg. horse meat, 50 c.; 2 endives, 30 c.; 1 litre of milk, 20 c.; ½ kg. of coffee, 90 c.; 200 gms. celery; 1 600 gms. tart, 80 c.

Monday.—2 kg. of bread, 45 c.; ½ kg. butter, 90 c.; 2 kg. potatoes, 20 c.; ½ kg. horse meat, 40 c.; ½ kg. apples, 20 c.; 1 litre milk, 20 c.; 60 gms. sugar, 5 c.; parsley, 10 c.; 750 gms. beer (1 bottle), 10 c.

Tuesday.—2 kg. bread, 45 c.; 120 gms. sugar, 10 c.; ½ kg. horse meat, 50 c.; 3 kg. potatoes, 30 c.; red cabbage, 30 c.; ½ litre milk, 15 c.; ½ kg. butter, 90 c.; ½ kg. dripping (for frying), 60 c.; 125 gms. bacon, 22 c.

Wednesday.—2 kg. bread, 50 c.; ½ kg. butter, 90 c.; 1 pigeon (½ kg.); 2 60 gms. sugar, 5 c.; ½ kg. black pudding, 20 c.; 1 litre milk, 20 c.; 3 kg. potatoes, 30 c.; ½ kg. endives, 20 c.; ½ kg. tomatoes, 10 c.

Thursday.—2 kg. bread, 45 c.; ½ litre milk, 15 c.; 1 kg. horse meat, 1 fr.; 2 bottles of beer, 20 c.; ½ kg. onions, 15 c.; ½ kg. butter, 90 c.; 60 gms. sugar, 5 c.; 1 kg. potatoes, 10 c.; mustard, 5 c.; 125 gms. gooseberry jam, 10 c.

Friday.—2 kg. bread, 45 c.; ½ litre milk, 15 c.; 200 gms. beef liver, 20 c.; ½ kg. butter, 90 c.; 2 kg. potatoes, 20 c.; 1 kg. turnips, 10 c.

Saturday.—2 kg. bread, 45 c.; ½ litre milk, 15 c.; 1 kg. potatoes, 10 c.; ½ kg. butter, 90 c.; ½ kg. tomatoes, 15 c.; ½ kg. apples, 10 c.

¹ From garden. ² From pigeon-house.

MENU OF MEALS PROVIDED DURING WEEK ENDING
 NOVEMBER 11, 1906

	Brekfast.	Lunch.	Dinner.	Tea.	Supper.
Sunday	Coffee, milk, sugar, bread, butter, "beef-steak"(horse).	Coffee, milk, sugar, bread, butter.	"Beef-steak" (horse), vegetables, potatoea, butter.	Coffee, milk, tart.	Ham and endives.
Monday	Coffee, milk, tart.	Coffee, milk, sugar, bread.	Vegetable soup, bread and butter, minced horse meat, beer.	Coffee, milk, bread.	Vegetable soup, apples, bread.
Tuesday	Coffee, milk, sugar, bread.	....	Fried "beef-steak"(horse), bread.	Coffee, sugar, milk, bread.	Red cabbage, bacon, potatoes, bread.
Wednesday	Coffee, milk, bread.	....	Pigeon, potatoes, bread.	do.	Tomato soup, black pudding.
Thursday	Coffee, milk, sugar, bread.	....	Soup, potatoes, mustard, beer.	Coffee, milk, bread, jsm.	Remains of soup, bread, butter, onions, beer.
Friday	Coffee, milk, bread, butter.	....	Turnip soup, bread.	Coffee, milk, bread.	Remains of soup, beef liver.
Saturday	do.	....	Tomato soup, apples, bread.	Coffee, milk, bread.	Remains of soup, beef-steak (<i>de vache</i>).

Thirteen of the families in this class are under-fed, and five adequately fed, although the diet of one of the latter is badly arranged, showing a deficiency of protein and a surplus of fuel energy.

On the average the under-feeding both in protein and fuel energy amounts to about 9 per cent, but sometimes it is much greater. The worst case is that of Study No. 24, which shows a deficiency of 38 per cent in the supply of protein, and 41 per cent in the fuel energy. The best-fed families are those with the fewest mouths to feed, a fact which tends to show that the inadequacy of diet, where it exists, is due to insufficiency of income rather than to wastefulness of resources.

The detailed figures regarding the dietary of the class are given in the following table:—

THE DIET OF FAMILIES IN CLASS II.

Number of Study.	Locality.	Description of Family.				Average Weekly Income of Family.	Cost of Diet.			Sufficiency	
		Occupation of Head of Household.	Number in Family.				Average Weekly Expenditure on Food.	Expenditure on Food per Man per Day in Pence.	Protein per Man per Day.	Deficiency or Excess of Protein per Man per Day. ¹	
			Adults.	Children.	Equivalent to Men.						
16	Lokeren	Mason's labourer . .	4	..	3·6	s. d. 22 11	a. d. 14 4	62·6	6·86	87	-88
17	Ghent	Labourer	2	7	5·2	19 4½	12 11	66·7	4·26	97	-28
18	"	Ironworker	2	5	4·1	24 8	15 10½	64·3	6·63	96	-29
19	"	"	2	2	2·9	21 1½	18 6½	59·4	8·0	123	- 2
20	"	Labourer	3	2	3·2	19 10	15 9	75·3	8·19	127	+ 2
21	Antwerp	Worker in paper factory	2	2	2·6	21 1	12 5	53·8	8·18	144	+19
22	"	Inlaid floor worker	2	1	2·2	22 3½	9 6	42·6	7·39	134	+ 9
23	"	Cigar-maker	2	5	4·6	25 2½	14 5	56·8	6·39	107	-18
24	"	"	2	7	5·1	19 8	12 3	62·3	4·12	77	-48
25	"	"	2	3	3·0	20 0	15 11	66·6	9·10	136	+11
26	Brussels	Telephone worker . .	2	1	2·1	23 9½	11 1½	46·8	9·09	116	- 9
27	"	Marble polisher . . .	4	2	4·8	20 9½	14 2½	68·4	6·08	90	-35
28	Liège	Day labourer	2	1	2·6	25 6	12 1	46·4	8·28	96	-29
29	"	Printer	2	1	2·2	23 2	16 2½	69·8	12·62	171	+46
30	"	Metal-worker	2	4	3·8	17 3½	18 5½	75·2	6·30	92	-33
31	Jumet	Day labourer	2	1	2·3	22 10	16 6	72·4	12·36	136	+11
32	"	"	2	2	3·1	23 1	15 7½	65·7	8·86	102	-23
Average	..	..	2	3	3·4	21 11	13 10½	61·1	7·90	113	-11

¹ Standard requirements, 125 grams.

The varying degrees of economy in the choice of food-stuffs is indicated in the columns in the above table, which show the number of grams of protein and the calories of fuel energy which each housewife purchases for a shilling. It will be noted that while on the average the families obtain 5138 calories and 180 grams of protein for a shilling, as against 240 grams of protein and 7124 calories of fuel energy obtained by Class I., the figures vary considerably, some housewives buying much more economically than others. Personal tastes are allowed a little more sway in the choice of food-stuffs in this class than in the previous one. It may be noted that although 55 per cent of the food expenditure is upon animal food-stuffs, these only provide 30 per cent of the total calories and 34½ per cent of the protein.

(FAMILY INCOME 16s. 8d. TO 25s. 9d.)

of Diet.		Economy of Diet.		Animal and Vegetable Food, etc.									
Energy Value per Man per Day.	Deficiency or Excess of Energy Value per Man per Day. ³	Amount obtained for one Shilling.		Percentage of Protein obtained from			Percentage of Calories obtained from			Percentage of Cost spent in			
		Protein.	Energy Value.	Animal Food.	Vegetable Food.	Alcoholic and non-Alcoholic Beverages and Condiments.	Animal Food.	Vegetable Food.	Alcoholic and non-Alcoholic Beverages and Condiments.	Animal Food.	Vegetable Food.	Alcohol.	Non-Alcoholic Beverages and Condiments.
Cals.	Cals.	Grs.	Cals.										
2810	690	152	4916	32.0	68.0	..	34.2	65.8	..	51.3	41.6	..	7.1
3000	500	? ³	?	25.3	74.6	0.1	25.4	74.5	0.1	?	?	..	?
2903	- 597	174	5255	28.4	71.3	0.3	33.6	66.0	0.4	47.4	48.0	1.4	3.2
3423	77	184	5137	30.3	69.3	0.4	23.8	75.5	0.7	39.5	56.2	2.5	1.8
3147	- 353	186	4613	40.5	59.0	0.5	29.0	70.3	0.7	55.1	39.9	3.2	1.8
3505	+ 5	210	5140	40.9	59.1	..	26.3	73.7	..	64.5	35.5	..	..
3374	126	217	5476	39.8	60.2	..	26.5	73.5	..	50.8	45.9	..	3.3
3101	399	239	6908	29.0	71.0	..	24.4	75.6	..	49.0	46.1	..	4.9
2068	- 1432	225	6026	32.6	67.4	..	25.2	74.8	..	56.4	36.4	0.2	7.0
3528	+ 28	179	4651	43.3	56.3	0.4	30.4	63.8	0.8	56.0	34.4	3.1	6.5
3211	- 289	153	4237	45.4	54.4	0.2	41.0	58.8	0.2	63.4	30.8	0.7	5.1
2990	- 510	213	7068	13.6	86.4	..	18.7	81.3	..	52.3	41.1	..	6.6
2943	- 557	140	4262	35.4	64.6	..	32.6	67.3	0.1	60.7	32.0	..	7.3
3511	+ 11	162	3337	64.9	33.5	1.6	40.0	54.3	5.7	58.2	27.3	2.5	12.0
3155	- 345	175	6012	25.3	74.7	..	32.2	67.8	..	49.4	42.2	..	8.4
4140	+ 640	133	4036	32.6	64.3	3.1	32.5	63.7	4.8	60.6	28.7	5.9	4.8
3423	- 77	188	4635	28.7	68.9	2.4	33.9	62.9	3.2	60.5	26.0	7.2	6.3
3190	310	180	5138	34.6	64.9	0.5	29.9	69.1	1.0	54.7	38.3	1.6	5.4

² Standard requirements, 3500 calories.

³ Figures omitted because this family received so much in charity.

Before passing to the next class, the general expenditure of the families now under consideration will be analysed.¹ The table on p. 366 supplies the necessary figures. Upon the average, expenditure on food absorbs nearly two-thirds of the total income, though the proportion varies considerably, from a minimum of 46 to a maximum of 75 per cent. As in Class I., it is high, as a rule, when the families are large, though there are exceptions. Nine families spent money on alcohol. Roughly speaking, the amount spent on clothes varies in inverse ratio to food expenditure: among the poor it is a recognised fact that any increased outlay on the one means going short of the other.

Rent absorbs an average of 12 per cent—here, again, the

¹ As already explained, such an analysis, based as it is upon budgets kept only for a month, can only be regarded as a rough indication of the actual facts.

PERCENTAGE OF EXPENDITURE DEVOTED TO VARIOUS PURPOSES BY FAMILIES IN CLASS II.¹

Number of Study.	Number in family.		Average Weekly Income of Family.	Percentage of Total Expenditure devoted to						Excess of Income over Expenditure.	Total Percentage.	Excess of Expenditure over Income.
	Adults.	Children.		Food.	Rent.	Clothing, Lighting.	Fuel and Insurance and Sick Clubs.	Sundries.				
									Per cent.				Per cent.
16	4	0	s. d. 22 11	62.6	6.6	7.1	8.6	1.1	6.3	7.7	100	...
17	2	7	19 4½	66.7	7.0	3.2	5.2	1.2	10.6	6.1	100	...
18	2	5	24 8	64.3	6.5	1.3	6.7	4.3	7.0	9.9	100	...
19	2	2	21 1½	59.4	11.6	5.7	9.6	5.4	8.3	...	100	7.1
20	3	2	19 10	75.3	9.5	3.9	5.8	3.1	2.3	...	100	5.3
21	2	2	21 1	53.8	12.3	9.6	4.6	0.9	18.7	...	100	8.5
22	2	1	22 3½	42.6	14.4	8.6	5.1	6.2	15.5	7.6	100	...
23	2	5	25 2½	56.8	14.1	9.4	7.0	2.8	9.9	...	100	1.1
24	2	7	19 8	62.3	14.2	...	10.9	4.6	3.4	4.6	100	...
25	2	3	20 0	66.6	13.4	1.3	4.9	1.8	11.9	...	100	16.3
26	2	1	23 9½	46.8	16.8	5.0	8.2	...	15.9	7.3	100	...
28	2	1	25 6	46.4	16.1	15.2	9.7	4.7	7.8	...	100	2.7
30	2	4	17 3½	75.2	11.2	...	10.8	...	2.8	...	100	10.7
31	2	1	22 10	72.4	9.2	1.2	4.5	...	5.9	6.8	100	...
32	2	2	23 1	65.7	12.6	...	5.8	...	15.9	...	100	3.6
Average	2	3	21 11	61.1	11.7	4.8	7.2	2.4	9.5	...	100	0.4

¹ All the budgets were kept for four weeks, except Nos. 18, 19, and 20, which were kept for five weeks.

proportion varies greatly, viz. from $6\frac{1}{2}$ to 17 per cent. Only in three cases, however, is it less than 9 or over 15 per cent.

Eight of the families in this class have spent during the month more than they received, while seven have saved money. Considering how extremely narrow are their resources, it is greatly to their credit that eleven out of the fifteen families devoted on the average $3\frac{1}{3}$ per cent of their total expenditure every week to insurance of one kind or another.

The accounts of these fifteen families taken together show a deficit equal to about 0·4 per cent of their total income. It is clear that unless the income of the families is increased, the accounts can only be balanced in one of two ways. Either the traders who have supplied goods on credit will ultimately write off the amount as bad debts, or the families will pay their debts by a still further curtailment of their expenditure upon food. As, however, their present food-supply is about 9 per cent below what is required for the maintenance of full physical efficiency, the results of still further reducing it would be serious. Certainly if they had a better knowledge of the dietetic value of different food-stuffs, and would act upon it, they might make some reduction in the cost of their food without decreasing its nutritive value. But such families are already buying economically, and one cannot in practice expect them to possess a more exact and scientific knowledge of dietetics than other classes of the community.

In conclusion, the examination of the budgets of these fifteen families, representing as they do the thrifty hard-working labouring classes, at that period of their lives when children are depending upon them, indicates that they are without the resources necessary to maintain themselves in a state of physical efficiency.

CLASS III.—*Twenty-one families, with incomes over 25s. 9d.*
Average income 35s. 3½d.

5 live in Brussels, 6 in Antwerp, 2 in Ghent, 2 in Lokeren (E. Flanders), 3 in Liège, and 3 in Jumet (near

Charleroi), the last 6 belonging to the Walloon district of Belgium. The occupations of the chief wage-earners are as follows:—2 miners, 4 skilled workers in metal industries, 1 machinist, 1 foundry labourer, 2 wood-carvers, 1 cabinet-maker, 1 shoemaker, 1 waiter, 1 mason, 1 docker, 1 hemp-dresser, 1 fur-puller, 3 labourers, 1 cigar-maker, 1 bookbinder.

STUDIES OF TYPICAL FAMILIES IN CLASS III.

STUDY No. 48.—CABINET-MAKER IN JUMET. WAGES 24s. 9½d. PER WEEK. TOTAL INCOME OF FAMILY 30s. 10d. PER WEEK

The cabinet-maker is a man with a pleasant face and grey hair, looking older than he really is. His wife, who is what the English call "house-proud," is thin and worn with the effort to have everything "just right," and at the same time pay her way; but the two girls are tall and healthy.

They are buying their house by monthly instalments of 21 francs (16s. 10d.); the land, which cost 500 francs (£20), is theirs already. The front door opens directly upon the parlour, which is well furnished, perhaps giving the impression that the family is better off than it is. There is a good deal of bric-à-brac, a clock, a mirror, and a suite, consisting of a carved oak table, six chairs, and a sideboard, which, like the house, is being purchased by instalments. Also there is an ornamented cupboard of veneered walnut, which the cabinet-maker himself fashioned out of old packing-cases! There are a few plants, one of them on a high oaken pedestal; and the conventional type of picture hangs on the wall; while literature is represented by a *Manual of Ladies' Handicrafts*.

The kitchen is much more homelike, although it is sombre, what light there is coming through the glass door that leads into the parlour. But this is remedied at night when the large lamp is lit. The furniture consists of the usual cooking stove and a painted dresser, besides chairs and table and a sewing-machine. Everything is spotlessly clean, but the atmosphere is oppressive, as there is no window to fling open, and the smell of cooking hangs about all day long.

A somewhat narrow staircase leads to the first floor landing, from which the doors of the two bedrooms open out. That of the parents is large, with a good wooden bedstead, a small wash-stand with drawers, an oval mirror, a dressing-table with a handsome toilet set, and a round table. The room of the daughters is smaller, and the look of it is spoiled by a ladder leading to the attic.

Whatever be the housewife's regard to appearances, she does not sacrifice the essential matters of food and comfort to them, for the bill of fare is liberal.

The dietary of the family exceeds standard requirements.

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STATEMENT OF INCOME AND EXPENDITURE FOR FOUR WEEKS, NOVEMBER 4-18, DECEMBER 2-16, 1906

INCOME—	
Father, four weeks' wages	£4 19 2
Daughter (age eighteen), four weeks	0 18 7
Daughter (age sixteen), four weeks	0 5 7
	£6 3 4
EXPENDITURE—	
Food (including beverages)	£4 12 5½
Instalment of payment for house	0 16 9½
Clothing (three hats)	0 13 0
Boots (2 pairs, 24 frs.; 1 pair galoshes, 2.75 frs.)	1 1 5
Coal and wood	0 4 2
Oil	0 1 5½
Blacklead	0 0 2
Clothes - brush and blacking-brush	0 0 10½
Dishcloth	0 0 6
Tobacco	0 0 7
	£7 16 5
Deficit ¹	1 13 1
	£6 3 4

¹ This family buys articles of dress, furniture, etc., "par abonnement." It is probable that the hats and boots, the full price of which is given here, are being paid for by instalments.

PURCHASES DURING WEEK ENDING NOVEMBER 11, 1906

Sunday.—1 kg. beef for soup, 1.60 frs.; ¼ kg. beef for roasting, 1.80 frs.; 125 gms. vermicelli, 15 c.; 1 litre milk, 20 c.; ¼ kg. sugar, 30 c.; 1 kg. pears, 30 c.; ½ kg. chocolate, 1.45 frs.; 1 kg. potatoes, 10 c.; 200 gms. endives, 15 c.; 2 kg. bread, 45 c.; 2 kg. butter, 6.80 frs.; 3 hats (mother and daughters), 22.60 frs.

Monday.—¼ kg. hashed meat ("vache"), 60 c.; ½ litre milk, 10 c.; ¼ kg. coffee, 1.25 frs.; ½ kg. chicory, 20 c.; 6 kg. bread, 1.35 frs.; 1 kg. potatoes, 10 c.; ½ kg. beef suet, 60 c.

Tuesday.—1 litre milk, 20 c.; ¼ kg. veal, 60 c.; 3 kg. potatoes, 30 c.; vegetable soup, 10 c.; 1 ½ kg. rice, 20 c.

Wednesday.—1 litre milk, 20 c.; 1 kg. potatoes, 10 c.; 375 gms. hashed meat ("vache"), 75 c.; 6 kg. bread, 1.35 frs.; 1 cabbage, 25 c.; 2 tins (190 gms.) sardines in oil, 50 c.

Thursday.—¼ kg. beef, 75 c.; 1 kg. potatoes, 10 c.; ½ litre milk, 10 c.; 1 box (½ kilo.) macaroni, 30 c.; endives, 15 c.; 40 gms. cheese, 10 c.

Friday.—½ litre milk, 10 c.; 3 kg. potatoes, 30 c.; 1 kg. carrots, 15 c.; ¼ kg. haricots, 25 c.; 6 kg. bread, 1.35 frs.; 960 gms. mussels, 40 c.

Saturday.—½ litre milk, 10 c.; 1 kg. potatoes, 10 c.; 375 gms. mutton, 60 c.; 350 gms. vegetables for soup, 10 c.; 150 gms. "black pudding," 30 c.

1 50 gms. chervil, 100 gms. parsley, 2 onions (150 gms.).

MENU OF MEALS PROVIDED DURING WEEK ENDING NOVEMBER 11, 1906

	Breakfast.	Dinner.	Tea.	Supper.
Sunday .	Coffee, milk, sugar, bread and butter.	Soup, roast beef, potatoes, endives, pears.	Bread, and chocolate made with milk.	Bread, and the beef from the soup.
Monday .	do.	Soup, meat-balls, ¹ potatoes.	Bread and butter, coffee, milk, sugar.	do.
Tuesday .	do.	Vegetable soup, veal, potatoes.	do.	Soup, boiled rice.
Wednesday	do.	Soup, meat-balls, potatoes, and cabbage.	do.	Soup, sardines, bread.
Thursday .	do.	Soup, boiled beef, potatoes, endives.	do.	Soup and macaroni.
Friday .	do.	Carrot soup, potatoes, haricots, mussels.	do.	Soup and bread.
Saturday .	do.	Vegetable soup, mutton, potatoes.	do.	Soup, "black pudding," bread.

¹ "Boulettes."

STUDY No. 49.—MINER IN JUMET. WAGES 25s. 6d. PER WEEK.
TOTAL EARNINGS OF FAMILY 32s. 3d. PER WEEK

This family lives in a semi-detached cottage, which is rather gloomy in appearance, although there is a small garden in front and a larger one behind. It consists of the miner, his wife, and three children, two of whom are working. One daughter is a glass cutter, while the son is employed in the warehouse of a glass works.

The father is small, very thin and pale, and obviously worn out by the work of which his face and hands bear traces. He is a night worker, and only sees the sunshine on Sundays and Mondays. But his mental outlook is not limited by the mine, for he interests himself keenly in labour politics, and is the Secretary of the Trade Union formed by the miners among whom he works.

His wife is well built, and very bright and intelligent, with quick sympathies, and an outlook still wider than that of her husband.

The son, who suffered from meningitis in his infancy, is frail and narrow-chested, while the eldest daughter is big and strong with rosy cheeks. As for the younger daughter, she is somewhat anæmic, but not thin, and is evidently the spoiled child of the household.

On entering, we find ourselves in the front room, which is rather dark as the window is small and half-shrouded by curtains. What with the absence of sunshine and the fact that the fire is hardly ever lighted, the air is cold and damp. The furniture consists of table and chairs, sewing-machine, and the painted wooden cupboard with swinging doors and a drawer above which is typical of most workmen's dwellings in Belgium, with a pretty coffee service displayed upon it.

The kitchen is rather smaller than the parlour; and it too is dark, because the window is narrow and partly covered with white curtains. It is the ordinary kitchen of a Belgian working-class house, with a Flemish stove, a good-sized table, half-a-dozen chairs, and a wicker arm-chair, also the usual advertisement chromolithographs. It has one undesirable characteristic, which is common to many Belgian rooms, *i.e.* a great many doors. There is the door from the parlour; there is a glass door leading into a passage which separates this house from the next; and there are two more doors! One of them opens upon the cellar steps—the cellar being filled with water after the least rain is useless for storage purposes, and the landing serves as a pantry. The other door opens on a steep and dark staircase, leading to the first floor. This terminates in a comparatively large light room, with a good wooden bedstead, in which the parents sleep with the youngest girl, and an iron bedstead for the son. There is also a little table. The eldest girl sleeps apart, in a room as large as that of her parents, though it has no furniture but her bed. Her clothes hang on the wall. There is a small attic on the same floor, occupied by the youngest girl when she is not sleeping with her mother.

A number of cracks in the wall, some of them very large, remind one that the cottage is situated above a coal mine, and that the soil is sinking through the falling in of the galleries. The Colliery Company is pledged to pay for the repair of such dilapidation. The rent of the house is 11s. 3½d. per month.

There is a slight deficiency in the dietary of the family from standard requirements, amounting to 7 per cent of protein and to ½ per cent of energy value.

STATEMENT OF INCOME AND EXPENDITURE FOR FOUR WEEKS, NOVEMBER 4-18, DECEMBER 2-16, 1906

INCOME—	
Father (miner)	£5 2 0
Son, thirteen (in warehouse of glass works)	0 9 6
Daughter, fifteen (glass cutter)	0 17 6
	£6 9 0
EXPENDITURE—	
Food (including beverages)	£3 14 5
Rent	0 11 3½
Clothing and mending materials	1 4 3
Shoes and sabots	0 18 2½
Soap	0 0 10
Coal	0 3 3½
Oil and matches	0 1 10
Tobacco	0 0 8½
Cleaning and washing materials	0 1 0½
Trade Union and insurance	0 3 0
Contribution to husband's father (per week)	0 1 7
Twelve towels	0 3 2
Dishcloth	0 0 6
Newspapers	0 0 4
	£7 4 5½
Deficit ¹	0 15 5½
	£6 9 0

¹ The deficit is probably accounted for by the fact that the father, son, and daughter had two days off while the budget was being kept.

PURCHASES DURING WEEK ENDING NOVEMBER 11, 1906 .

Sunday.—½ kg. coffee, 1·00 fr.; 2 kg. bread, 50 c.; 3 kg. potatoes, 25 c.; endives;¹ ½ kg. fat for frying, 50 c.; 1 litre milk, 20 c.; ½ kg. butter, 85 c.; ½ kg. chicory, 20 c.; 1 kg. pork, 2·20 fra.; ½ kg. bacon, 1·00 fr.; ½ kg. sugar, 20 c.; 1 litre beer, 20 c.

Monday.—2 kg. bread, 50 c.; 3 kg. potatoes, 25 c.; 1 kg. bones for soup, 30 c.; ½ kg. butter, 85 c.; 1 litre milk, 20 c.; ½ kg. parsley;¹ 1 leek.¹

Tuesday.—2 kg. bread, 50 c.; 3 kg. potatoes, 25 c.; ½ kg. butter, 85 c.; 1 litre milk, 20 c.

Wednesday.—2 kg. bread, 50 c.; 3 kg. potatoes, 25 c.; 125 gms. bacon, 25 c.; ½ kg. butter, 85 c.; 3 sticks of celery;¹ 1 litre milk, 20 c.

Thursday.—2 kg. bread, 50 c.; 3 kg. potatoes, 25 c.; 1 litre milk, 20 c.; ½ kg. butter, 85 c.; ¾ kg. minced beef, 1·35 fra.

Friday.—2 kg. bread, 50 c.; 3 kg. potatoes, 25 c.; 125 gms. bacon, 25 c.; ½ kg. butter, 85 c.; endives;¹ 1 litre milk, 20 c.

Saturday.—2 kg. bread, 50 c.; ½ kg. haricots, 20 c.; 1 litre milk, 20 c.; 3 kg. potatoes, 25 c.; ½ kg. butter, 85 c.; 5 herrings, 75 c.; 125 gms. bacon, 25 c.; ½ kg. carrots, 7 c.

¹ Taken from the garden.

MENU OF MEALS PROVIDED DURING WEEK ENDING
NOVEMBER 11, 1906¹

	Breakfast.	Dinner.	Tea.	Supper.
Sunday .	Coffee, milk, bread, butter, jam.	Roast pork, pota- toes, endives (as salad), beer.	Coffee, milk, bread, butter, jam.	Roast pork, bread.
Monday .	do. and sugar.	Vegetable soup, ² bread, butter.	Coffee, bread, butter.	Soup, bread, butter.
Tuesday .	Coffee, milk, bread, butter.	Coffee, milk, bread, butter.	Coffee, milk, bread, butter.	Fried potatoes, bread, butter.
Wednesday	do.	do.	do.	Celery salad, bacon fat.
Thursday .	do.	Minced beef ³ (in balls), potatoes.	do.	Remains of dinner, bread, butter.
Friday .	do.	Coffee, milk, bread, butter.	do. (no milk).	Potatoes, endives (as salad).
Saturday .	do. and sugar.	Potatoes and carrots.	Coffee, sugar, bread and butter.	Herrings and haricots.

¹ In addition to the meals here mentioned, the mother, and sometimes some of the others, had a cup of coffee and slice of bread and butter in the middle of the morning.

² Parsley and leeks.

STUDY NO. 44.—WOOD-CARVER, BRUSSELS. WAGES 36s. PER WEEK.
TOTAL FAMILY INCOME 60s. PER WEEK

This family lives in an industrial suburb of Brussels, occupied by working-class people. The air of the whole district is very far from bracing, but just here it is stifling. From a brewery close by come the fumes associated with that industry, and beer-houses abound—indeed, the atmosphere reeks of beer. There are a great many drunkards, and one would hardly care to meet at night the people one sees here during the day. Yet this quarter is only a few steps from one of the busiest parts of the town and from the South Station.

The home of the wood-carver is reached through a passage which at its far end widens into a small court, and it is one of a row of seven two-story houses. There is not much daylight, since it is shut out by the surrounding houses and walls; and the property looks dirty and insanitary. The seven houses have only two closets in common. We are told that the landlord collects his rents himself on Sundays, and that this is the extent of the attention which he pays to his property! Indeed, the wood-carver has had to repaper a room at his own expense, and, with some difficulty, to repair a ceiling which threatened to fall down on the beds. The walls are so thin that a

nail driven well in goes right through into the neighbour's room. Everything that goes on next door can be heard, and privacy is practically impossible.

The tenants in all the other houses in the court are very poor, and most of them, even the women, drink heavily. Their trades are difficult to define. Among them is a ragpicker, who keeps a store of rubbish, and goes through his spoil in the open court when the weather is fine, or in a shed which opens out into it when wet. In this way he introduces all sorts of infection, and when a malady enters the court it usually claims several victims. Preventive measures are only taken when some one has actually died, and then the medical officer of health promptly orders disinfection. While this budget was being kept, two children in the court died, one of scarlatina, caught from the wood-carver's family, and the other of croup. In spite of the moral and physical drawbacks of this environment, the household of the wood-carver seems bound to the court, by bonds of habit and inertia, though their income would allow them to live elsewhere if they chose.

The wood-carver is said to be a very good workman. He is of small stature, with bright intelligent eyes, and his brown hair is turning grey. He is in good health, and always in high spirits, and he likes reading, and buys good books. Although not intemperate, he is very fond of a glass of beer.

His wife is tall and fair. She has a sweet face, but child-bearing and hard work have worn her out before her time. As the daughters are still too young to help her, she has to do everything, including the washing for the whole family. She rises at five o'clock to light the fire, make the coffee, and prepare for her husband and the three sons, who have breakfast before they go to work, and take coffee and bread and butter with them. In spite of all her hard work, she keeps her good humour, and as long as there is plenty to eat and drink finds life decidedly worth living. With regard to her large family, she says that if she had known what every young housewife knows now, she would not have had so many children. In fact, her husband is the butt of the younger workmen for not knowing these things, and two years ago when she was expecting her last child she carefully concealed the fact from every one that he might not be laughed at. The child was born prematurely and only lived fifteen days. No one guessed of its existence except the communal authorities who registered the birth.

The eldest son is eighteen. He is a tall, strong lad; while the other two boys are small like their father, and look delicate, though they do not suffer from any actual complaint. They all three work in the same chocolate factory. The three youngest children are lively and bright, but small and pale, and frequently ill—no wonder, considering their surroundings. Last winter three of the children had scarlatina and two influenza.

The interior of the cottage is not so dingy as one might expect from

the situation. The upper part of the kitchen walls is neatly covered with a pretty blue and white paper, the lower part being painted black. The paint, it is true, is almost worn off, and the plaster shows through, but there is so much good, carefully-kept furniture to look at that this is hardly noticed. In the first place, there is a substantial table and six chairs. Then, besides a large well-polished cooking-stove, there is a linen cupboard of painted wood, with some useful crockery and the orthodox china statuettes, a chest of drawers, on which stands a somewhat dilapidated coffee service, and a sewing-machine. One feature of the room is a set of shelves neatly trimmed with paper lace, on which more household utensils and ornaments are arranged. The fine arts are represented by a score of oleographs, colour-prints, and photographs, most of them in handsome frames made by the husband. The three cats lying by the stove look too innocent even to alarm the canary in the cage near the window.

A dark staircase leads to the first floor, on which is the bedroom occupied by the parents and daughters. This room, too, is large, and much lighter than that on the ground floor, because its two little windows hung with curtains are higher than the wall of the court. Against the wall facing the door is a good-sized bed covered with a cream-coloured counterpane of crochet work, a most expensive production, for the cotton cost 16s. and the labour 22s. 5d. There is a table beside the bed, and between it and the window an easy-chair covered with American cloth, and a cupboard of imitation walnut, holding a number of knick-knacks and photographs. A little stove stands at the foot of the bed, and turning to the chimney-piece we see a large mirror, a clock, and two vases in black stone inlaid with colour. Facing the bed is a wardrobe, well painted in walnut colour. Between the windows is a table, on which are albums and books, and above it is a bracket filled with inartistic ornaments.

Against one of the walls formed by the well of the staircase is an iron bed, in which the two girls sleep. The walls are decorated with bas-reliefs in plaster, models of work done by the father, and some pretty engravings and photographs in handsome frames.

Another dark narrow staircase leads to the attic where the four sons sleep in two beds; and a partition with a door in it has been put up to separate them from the rest of the attic for the sake of warmth. The beds are clean, but the air is close owing to lack of ventilation. The other part of the attic is used as a lumber-room and storehouse for vegetables and various provisions.

The whole house is kept in good order, and has a certain air of refinement unusual in the midst of such squalid surroundings. The family is not badly off, the total income amounting to £3 a week. They are well fed, as can be seen from the following tables, and the expenditure on food is judiciously made.

STATEMENT OF INCOME AND EXPENDITURE FOR FOUR WEEKS, NOVEMBER 11-25, DECEMBER 2-16, 1906

INCOME—	
Father (four weeks' wages at 36s. per week)	£7 4 0
Son (eighteen) employed in chocolate factory (four weeks' wages at 10s. 9½d. per week)	2 8 2
Son (sixteen) employed in chocolate factory (four weeks' wages at 8s. 5d. per week)	1 13 8
Son (fourteen) employed in chocolate factory (four weeks' wages at 4s. 9½d. per week)	0 19 2
	£12 0 0
EXPENDITURE—	
Food (including beverages)	£7 16 7
Washing and cleaning	0 2 10½
Coal, oil, matches and wood	0 11 11½
Life Insurance	0 1 2
Savings fund	0 6 5
Trade Union	0 1 7
Newspapers	0 2 2
Newspapers for the children	0 0 7
"Society of Free Thought" (burial fund)	0 0 3½
"Amendes" (four weeks) ¹	0 0 10
	£9 4 5½
Balance ²	2 15 6½
	£12 0 0

¹ "Amendes"—fine or compensation. The savings bank is kept in a public house, and if members are absent from the weekly meetings the publican recoups himself for his loss in drinks not consumed by fining the absent members.

² This budget was not kept for four consecutive weeks. The rent, paid monthly, happened to fall due during the week (Nov. 26 to Dec. 1) when the family was not under observation.

PURCHASES DURING WEEK ENDING NOVEMBER 17, 1906

Sunday.—4 kg. bread, 1'00 fr.; ¼ kg. butter, 80 c.; 1 litre milk, 14 c.; 3 kg. potatoes, 24 c.; 1 cauliflower, 20 c.; 1 egg, 1 5c.; 1 chicken, 4'25 frs.; vegetables for soup, 10 c.; 5 litres beer, 80 c.; ½ kg. sugar, 32 c.; ½ kg. jam, 50 c.; 25 herrings, 2'00 frs.; 125 gms. coffee, 20 c.; 2 kg. onions, 20 c.; 125 gms. chicory, 5 c.

Monday.—4 kg. bread, 1'00 fr.; 1 litre milk, 14 c.; ¼ kg. butter, 80 c.; 3 kg. potatoes, 24 c.; 1 cauliflower, 20 c.; 1 egg, 15 c.; 1½ kg. veal, 2'40 frs.; 125 gms. coffee, 20 c.; 125 gms. chicory, 5 c.; 1½ litres beer, 40 c.; soap, starch, soda, 62 c.

Tuesday.—5 kg. bread, 1'25 frs.; 1 litre milk, 14 c.; ¼ kg. butter, 80 c.; 3 kg. potatoes, 24 c.; 125 gms. coffee, 20 c.; 125 gms. chicory, 5 c.; 1½ kg. mutton, 2'50 frs.; turnips, 24 c.; 62 gms. cheese, 15 c.; 1½ litres beer, 40 c.; 1½ kg. apples, 40 c.

Wednesday.—4 kg. bread, 1'00 fr.; 1 litre milk, 14 c.; 1½ litres beer, 40 c.; ¼ kg. butter, 80 c.; 3 kg. potatoes, 24 c.; 125 gms. coffee, 20 c.; 125 gms. chicory, 5 c.; ¼ kg. cheese, 60 c.; 1 kg. hashed beef, 1'20 frs.; sausage meat, 15 c.; 2 eggs, 80 c.; 1 red cabbage, 15 c.; ½ kg. leeks, 20 c.; bones for soup, 25 c.; ¼ kg. apples, 10 c.

Thursday.—5 kg. bread, 1'25 frs.; 1 litre milk, 14 c.; 1½ litres beer, 40 c.; ¼ kg. butter, 80 c.; 3 kg. potatoes, 24 c.; 125 gms. coffee, 20 c.; 125 gms. chicory, 5 c.; vegetables for soup, 10 c.; 1½ kg. flank of beef, 1'80 frs.; cabbage, 25 c.; ½ kg. dripping, 70 c.; ½ kg. sugar, 32 c.; sausage meat, 40 c.; 1½ litres beer, 40 c.

Friday.—4 kg. bread, 1 fr.; 1 litre milk, 14 c.; ¼ kg. butter, 80 c.; 3 kg. potatoes, 24 c.; 125 gms. coffee, 20 c.; 125 gms. chicory, 5 c.; 5 litres buttermilk, 50 c.; ¼ kg. sugar, 15 c.; 875 gms. rice, 21 c.; 1 kg. fish (haddock), 1'50 frs.; ½ kg. jam, 50 c.; 1 tin sardines (190 gms.), 50 c.; 1½ litres beer, 40 c.; black lead, stove polish, turpentine and sand-paper, 33 c.; Life Insurance, 87 c.; Savings bank, 2 frs.; "Amendes," 27 c.; Trade Union, 50 c.; coal, 2'70 frs.; matches, 10 c.; wood, 20 c.; newspapers—*Foyer populaire*, 5 c.; *Vie populaire*, 10 c.; *Assiette au beurre*, 50 c.; *Le Peuple*, 35 c.; *Novlette*, 5 c.; for the children, 18 c.

Saturday.—4 kg. bread, 1 fr.; 1 litre milk, 14 c.; ¼ kg. butter, 80 c.; 3 kg. potatoes, 24 c.; 125 gms. coffee, 20 c.; 125 gms. chicory, 5 c.; 1 kg. fresh chicory, 40 c.; 875 gms. pork, 1'75 frs.; sausage meat, 50 c.; 1½ litres beer, 40 c.

MENU OF MEALS PROVIDED DURING WEEK ENDING
NOVEMBER 17, 1906

	Breakfast.	Lunch.	Dinner.	Tea.	Supper.
Sunday	Coffee, milk, bread, butter, sugar, jam.	Coffee, bread, butter.	Soup, chicken, potatoes, cauliflower, beer.	Coffee, milk, bread, butter, sugar, jam.	Remains of dinner and two bottles of beer ($1\frac{1}{2}$ lit.).
Monday	do.	do.	Veal, potatoes, cauliflower.	do. no jam.	Herrings, bread, two bottles of beer.
Tuesday	do. no jam.	do.	Stewed mutton, turnips, and potatoes.	Coffee, milk, bread, butter, sugar, cheese, apples.	Herrings, bread, two bottles of beer.
Wednesday	Coffee, milk, bread, butter, sugar.	Herrings, bread, butter, coffee.	Leek soup, meat balls, potatoes, red cabbage.	Coffee, milk, bread, butter, sugar, sausage meat.	Cheese, bread, two bottles of beer.
Thursday	do.	Coffee, bread, butter.	Soup, soup meat, potatoes, cabbage.	do. herrings instead of sausage.	Sausage meat, bread, two bottles of beer.
Friday	do. and jam.	do. and herrings.	Haddock, potatoes, buttermilk.	do. jam instead of herrings.	Sardines, bread, two bottles of beer.
Saturday	do.	do. no herrings.	Pork, chicory, potatoes.	do.	Sausage meat, bread, two bottles of beer.

Of the twenty-one families in this class, sixteen have incomes under £2, and five over £2, one running up to £3 : 12s. The average for the whole class is £1 : 15 : 3½. As will be seen from the table on page 378, twelve of the families are under-fed according to the Atwater standard, and nine are adequately fed—though two of these show a deficiency of protein, along with a surplus of calories. On the average the food supply corresponds almost exactly with the Atwater standard of requirements. As with the other classes, however, the average is made up of widely divergent figures, some families showing a heavy deficiency, others a considerable surplus.

It is interesting to note that the weekly income per

head in those households, showing a large deficiency in their food supply, is 6s. 5d., as compared with 8s. in the case of the four families which show a large surplus. Thus income is an important factor in determining the adequacy of the food supply, though there are certainly cases where a deficiency must be set down to other causes than poverty.

Upon the average, the householders in this class have obtained 4308 calories of fuel energy and 152 grams of protein for every shilling expended on food. This, it will be noted, is distinctly less than in Classes I. and II. This is not surprising; it simply indicates that there has not been the same stern regard for economy in the selection of food-stuffs, and more play has been allowed for the exercise of personal tastes. The following table gives the calories and the quantity of protein purchased by each householder. It will be seen that these vary enormously—some householders buying economically, others extravagantly.

[TABLE

THE DIET OF FAMILIES IN CLASS III.

Number of Study.	Locality.	Description of Family.				Average Weekly Income of Family.	Cost of Diet.			Sufficiency	
		Occupation of Head of Household.	Number in Family.				Average Weekly Expenditure on Food.	Expenditure on Food per Man per Day in Pence.	Protein per Man per Day.	Deficiency or Excess of Protein per Man per Day. ¹	
			Adults.	Children.	Equivalent to Men.						Amount.	Percentage of Total expended.
33	Lokeren	Flax-dresser . . .	6	4	7·7	36 2½	25 10	70·0	5·76	79	-46
34	"	Fur-puller . . .	3	6	6·6	34 4	23 3	67·7	7·11	133	+ 8
35	Ghent	Labourer . . .	2	3	3·3	27 7	19 0	68·9	9·88	140	+15
36	"	" . . .	3	2	3·6	31 7	28 9	68·9	10·65	138	+18
37	Antwerp	Moulder . . .	4	..	3·6	72 3½	25 8½	?	12·28	139	+14
38	"	Plumber . . .	2	2	2·4	27 4½	14 3½	51·9	9·98	143	+18
39	"	Cigarmaker . . .	4	2	4·8	41 2½	20 9½	67·5	7·43	84	-41
40	"	Bookbinder . . .	2	4	3·6	29 5½	13 8	47·9	6·72	94	-81
41	"	Docker . . .	2	3	3·2	28 2½	16 7½	58·9	8·92	114	-11
42	"	Mason's labourer . . .	2	6	4·6	31 1½	20 11½	61·9	8·00	184	+59
43	Brussels	Metal polisher . . .	2	1	2·4	34 3½	21 2	?	15·16	116	- 9
44	"	Wood carver . . .	4	4	6·2	60 0	39 2	?	10·84	158	+33
45	"	Shoemaker's machinist . . .	2	2	2·6	33 9½	17 7	?	11·61	107	-18
46	"	Wood carver . . .	2	1	2·4	31 4½	13 11	?	9·98	110	-15
47	"	Walter . . .	3	3	4·6	43 4½	27 4	63·1	10·46	97	-28
48	Jumet	Cabinetmaker . . .	2	2	3·3	30 10	23 1½	?	12·00	146	+21
49	"	Miner . . .	2	3	3·5	32 2½	18 7½	51·8	9·11	116	- 9
50	"	Metal worker . . .	3	4	5·0	38 4½	25 4½	66·0	8·97	110	-15
51	Liège	Machinist . . .	4	1	4·0	38 9	25 5	61·1	13·44	124	- 1
52	"	Miner . . .	5	2	5·9	65 7½	47 11½	72·5	14·82	140	+15
53	"	Blacksmith . . .	8	..	2·8	28 6½	17 6	61·2	10·75	118	- 7
Average	..	..	3	3	4·0	35 3½	22 9½	62·1	9·98	123	- 2

¹ Standard requirements, 125 grams.

We find, as might have been expected, that a smaller proportion of income is spent on vegetable and a greater on animal food than in Class II., the figures being 32 per cent on vegetable as compared with 38 per cent in Class II., and 60 per cent on animal as compared with 55 in Class II. Sixteen families in this group spend money on alcohol, averaging $5\frac{1}{4}$ per cent of their total food expenditure. In two cases about 20 per cent of the total food expenditure is for alcohol.

The relative cheapness of vegetable foods is shown by the fact that although they only absorb one-third of the total food expenditure, nearly two-thirds of the total number of calories are derived from them.

Curiously enough, the proportion spent on food is rather higher on the average than in Class II.¹

¹ See table on page 380.

(FAMILY INCOME OVER 25s. 9d.)

of Diet.		Economy of Diet.		Animal and Vegetable Food.										
Energy Value per Man per Day.	Deficiency or Excess of Energy Value per Man per Day. ²	Amount obtained for one Shilling.		Percentage of Protein obtained from				Percentage of Calories obtained from			Percentage of Cost spent in			
		Protein.	Calories.	Animal Food.	Vegetable Food.	Alcoholic and non-Alcoholic Beverages and Condiments.	Animal Food.	Vegetable Food.	Alcoholic and non-Alcoholic Beverages and Condiments.	Animal Food.	Vegetable Food.	Alcohol.	Non-Alcoholic Beverages and Condiments.	
Calories.	Calories.													
2304	- 1196	164	4798	40·3	59·7	..	39·3	60·7	..	60·7	33·5	1·5	4·3	
3825	+ 325	224	6454	24·4	75·4	0·2	21·1	78·5	0·4	47·8	48·6	1·7	1·9	
4003	+ 503	170	4868	30·7	68·9	0·4	27·1	72·2	0·7	49·3	45·2	2·6	2·9	
3681	+ 181	155	4130	44·8	53·1	2·1	35·4	61·1	3·5	60·0	23·3	10·3	1·4	
3217	- 283	136	3154	56·1	43·7	0·2	42·6	57·1	0·4	67·9	26·9	1·0	4·2	
3294	206	172	3956	64·2	35·8	..	43·4	56·6	..	64·7	31·6	..	3·7	
2363	- 1187	135	3817	33·6	66·4	..	32·6	67·4	..	72·7	22·9	..	4·4	
2686	814	163	4796	41·9	58·1	..	32·0	68·0	..	53·6	33·6	1·4	1·4	
3256	- 244	153	4381	38·8	60·0	1·2	30·1	66·7	3·2	48·0	27·9	19·4	4·7	
4742	+ 1242	276	7120	29·8	70·2	..	23·0	77·0	..	47·8	44·7	0·1	7·4	
3060	- 440	92	2416	57·8	41·4	0·8	43·6	54·3	2·1	69·8	23·5	6·1	0·6	
3959	+ 459	175	4392	46·5	53·4	1·1	33·2	64·2	2·6	58·7	29·0	7·0	5·3	
2720	- 780	111	2819	50·2	46·1	3·7	38·2	55·0	6·8	55·1	18·2	22·6	4·1	
3045	455	132	3670	53·0	47·0	..	39·1	59·5	1·4	58·0	33·0	4·7	4·3	
2910	- 590	111	3350	45·5	54·5	..	44·2	55·8	..	74·4	22·1	..	3·5	
4498	+ 998	146	4494	33·2	66·4	0·4	35·2	63·2	1·6	60·0	31·0	1·3	7·7	
3482	- 18	152	4583	34·4	65·2	0·4	35·4	64·0	0·6	70·5	27·5	0·4	1·6	
3481	- 19	147	4659	30·6	69·2	0·2	34·1	65·5	0·4	49·4	46·0	..	4·6	
3618	+ 118	136	3967	41·2	57·7	1·1	40·7	56·7	2·6	63·2	26·1	1·8	2·9	
4651	+ 1151	121	4037	32·0	66·2	1·3	32·0	65·1	2·9	56·3	33·7	2·0	8·0	
4114	+ 614	132	4613	15·7	84·3	..	23·9	71·1	..	64·1	32·7	..	3·2	
3472	- 28	152	4308	40·2	59·1	0·7	34·8	63·8	1·4	60·1	32·0	4·0	3·9	

² Standard requirements, 3500 calories.

Rent absorbs 9·4 per cent of the expenditure; about 2 per cent less than in Class II. The proportion varies greatly from family to family, in one being as low as 4½, in another as high as 14¾ per cent. The predominant proportion is between 7 and 12 per cent.

The percentage devoted to clothing is more than twice as high as in Class II., but, as previously explained, figures concerning general expenditure which are based on budgets kept only for a month cannot be looked upon as trustworthy.

Eight of the families have spent during the month beyond their income, and eight less than their income. Taking the class as a whole, the income exceeds the expenditure by 49s. 2½d.

PERCENTAGE OF EXPENDITURE DEVOTED TO VARIOUS PURPOSES BY FAMILIES IN CLASS III.¹

Number of Study.	Number in Family.		Average Weekly Income of Family.	Percentage of Total Expenditure devoted to						Excess of Income over Expenditure.	Total Percentage.	Excess of Expenditure over Income.	
	Adults.	Children.		Food.	Rent.	Clothing.	Fuel and Lighting.	Insurance and Sick Clubs.	Sundries.				Repayment of Debt.
33	6	4	36 2½	70.0	5.0	5.6	4.6	1.3	18.5	...	100	1.9	
34	3	6	34 4½	67.7	4.9	4.6	4.6	4.2	11.3	...	100	2.4	
35	2	3	27 7	68.9	6.5	4.7	1.3	3.4	5.1	...	100	10.1	
36	3	2	31 7½	68.9	12.6	1.1	5.7	2.2	4.4	...	100	5.1	
38	2	2	27 4½	51.9	14.7	4.8	3.4	2.9	16.3	...	100	6.0	
39	4	2	41 2½	67.5	9.7	4.5	7.4	3.1	7.8	...	100	33.8	
40	2	4	29 5½	41.9	9.1	20.5	6.6	12.4	9.5	...	100	9.8	
41	2	3	28 2½	58.9	8.6	8.2	9.0	...	11.8	...	100	0.7	
42	2	6	31 1½	61.9	10.9	10.3	6.3	1.9	8.7	...	100	...	
47	3	3	43 4½	63.1	11.5	...	...	...	1.0	...	100	...
48	2	2	30 10	59.2	10.8	25.1	3.6	...	1.3	...	100	...	
49	2	3	32 2½	51.8	7.7	29.3	3.5	2.0	5.7	...	100	...	
50	3	4	38 4½	66.0	9.4	11.7	3.5	...	9.4	...	100	10.8	
51	4	1	38 9	61.1	13.9	17.5	2.7	1.5	3.3	...	100	0.1	
52	5	2	65 7½	72.5	4.6	...	3.9	1.9	5.2	...	100	...	
53	3	0	28 6½	61.2	10.5	17.0	5.6	...	2.9	...	100	2.8	
Average	3	3	35 3½	62.1	9.4	10.4	4.5	2.3	7.4	0.2	100	...	2.1

¹ All the budgets were kept for four weeks, except Number 42, which was kept for five weeks.

AGRICULTURAL CLASS—*Sixteen Families*

The results of an examination of the budgets of sixteen agricultural families are here given, so that town and country life may be compared. They are less complete than the town budgets, for it is impossible accurately to assess the income of a farmer during any given month; much of the food, instead of being bought, is grown on the holding, and its money value cannot be exactly stated. The weight of the home-grown food used has been ascertained, but questions of income and expenditure have been left out of account.

Of the 16 budgets, 8 were obtained in a village near Ghent, East Flanders, 3 in a village in the south-west of the province of Liège, 3 in a village in the north of Luxembourg, and 2 in Brabant; 8 of them are from small holders who have no other occupation, 3 from small holders who follow some industry,¹ 4 from agricultural labourers who have land of their own, and 1 is that of a gamekeeper who has a small holding.

STUDY No. 65.—AGRICULTURAL LABOURER, ARDENNES, OWNING
28 RODS OF LAND WHICH COST £5 WHEN BOUGHT IN 1903

This house, which is very similar to that of an industrial workman, is on the high-road, about three-quarters of a mile from the village. It was constructed through a building society in 1904, when the husband obtained a loan which he is paying off by monthly instalments of 12s. 11d., and at the end of twenty years he will be the owner of the property. These instalments cover an insurance policy, so that if he dies the family will take possession of the house without any further charge. There are farm-buildings, a stable and cowshed, at present only occupied permanently by a goat, and for half the year by a pig as well.

The house is well built, of slate and stone, and it is quite large enough to accommodate the labourer, his wife, and three children very comfortably. On the ground floor is the kitchen, entered straight from the road. A staircase leads from it to the upper storey, and behind it is another room of nearly the same size. The furniture is

¹ Blacksmith, sabot-maker, and weaver respectively.

simple, but solid and adequate, and curtains, pictures, and ornaments are clean and well kept. On the first floor are two bedrooms, and above them an attic. The walls are well whitewashed, but the ceilings have not yet been plastered. There are two cellars, occupying the whole basement.

To turn to the family itself, though often on the brink of destitution, it is healthy and lighthearted. During the season the man works regularly, and his wages average 16 shillings a week; and from November to March he is employed in deer-driving. But when the weather is bad or the snow very deep, all work is postponed, and then the resources of the household are heavily taxed, though they have never yet resorted to poor relief. Luckily the wife is a good house-keeper, clean, energetic, and anxious about the welfare of the children. She keeps the family wardrobe in good order, and takes charge of the larder, seeing to it that potatoes and other vegetables from the garden are forthcoming; she also has charge of the "live-stock." She buys a pig in May or June, when wages are high, and fattens it till November. Two hams are sold, but the family is still provided with pork and bacon for a good part of the year.

The eldest boy goes to the free school, having a mid-day meal of bread and butter with an aunt who lives in the town; but the other children are still too young. Both man and wife are well informed; and both take life hopefully and pluckily, though the husband is the less reflective and more "happy go lucky." For the last two years they have dreamed of buying an adjacent field, of seven acres, but when, quite recently, an opportunity of purchase came, it was impossible to raise the money. The dream, however, still gilds their mental horizon, and if it ever comes true much prosperity may follow it, and the cowshed and stable may contain cows and horses instead of one goat and sometimes a pig.

The dietary of this family shows a deficiency of 21 per cent in the supply of protein, and of 6 per cent in energy value from standard requirements.

[TABLE

MENU OF MEALS PROVIDED DURING WEEK ENDING
DECEMBER 21, 1907

	Breakfast.	Lunch.	Dinner. ¹	Tea. ¹	Supper.
Sunday	Bread, butter, coffee, milk.	Bread, butter, coffee, milk.	Potatoes, bacon, soup meat (beef), soup, bread.	....	Potatoes, bacon, coffee, bread, butter, syrup.
Monday	do. and syrup.	Bread, butter, coffee.	Potatoes, bacon, bread.	....	Potatoes, cabbage, bacon, bread, water.
Tuesday	Bread, butter, coffee, milk.	do. and milk.	....	Bread, butter, syrup, coffee.	Potatoes, cabbage, bacon, bread, coffee, milk.
Wednesday	do.	Bread, butter, coffee, milk, syrup.	....	do., and milk.	Potatoes, cabbage, bread.
Thursday	do. and syrup.	do. no syrup.	....	Bread, butter, coffee, milk.	Potatoes, cabbage, bacon, bread.
Friday	Bread, butter, coffee, milk, cheese, syrup.	Bread, butter, coffee, milk, cheese.	....	Bread, butter, coffee, milk, syrup, cheese.	Potatoes, bacon, bread, cheese.
Saturday	do. no syrup.	do. and syrup.	....	Bread, butter, cheese, coffee, milk.	Potatoes, bacon, bread, butter, coffee.

¹ The meals called "dinner" and "tea" are interchangeable; when one is taken the other is omitted.

STUDY No. 68.—SMALL CULTIVATOR OWNING 12½ ACRES. BRABANT.

This farm stands alone, on high ground, with the stable and cowshed on one side, and barn, pig-sties, a store for fodder, and an oven for baking bread on the other.

The household consists of husband and wife, two children and the wife's father, who is employed as a gardener in the neighbourhood, and is often away from home. The whole of the property belongs to him, but he hardly ever interferes with his son-in-law's management. He is on capital terms with the latter: his daughter looks after him well, and he enjoys his life. In the evening he gossips with his neighbours, and the greater part of Sunday is spent at the nearest inn, where he has the reputation of an expert card-player. He is an honorary member of a brass band, to which he pays a yearly subscription of 4s.; but his musical activity is limited to sharing in its annual banquet.

His son-in-law is quite a different type of man, silent, thrifty and sober, and a good and careful workman. He seldom leaves the farm,

except on Sundays, when he attends mass, and stays at the inn till mid-day. Sunday afternoon is spent in playing with the children, or in helping his wife to clean the cow-shed, a matter of importance, since the four cows do the ploughing. He belongs to the *Comice Agricole* (see p. 227), paying an annual subscription of 2s. 5d. and receiving a weekly agricultural journal, which he reads with much interest, and he is recognised throughout the district as a good farmer, who employs the best methods. Lately he has considerably improved the cow-shed. Ventilation shafts have been introduced, the lower parts tarred and the floor guttered, while the roof, which formerly consisted of some poles on which hay and straw were stacked, has been replaced by a more solid structure. These changes were really the indirect result of a conference organised by the *Comice Agricole* of Jodoigne, in which he took part.

His wife gives him all the help she can. Like many energetic people she is quick-tempered, but she is a good housewife, and both her husband and father are so tranquil and good-natured that any irritability on her part does not really disturb the peace of the home.

There is nothing exceptional about the house itself. A passage from the front door extends straight through; and some steps lead down from it to a low untidy cellar. On the right is the kitchen, which is clean and simply furnished, with whitewashed walls, adorned by photographs of relations and a few religious pictures. On the chimney-piece are a crucifix, a clock, and two vases.

Behind the kitchen is a bedroom, with a second bedroom above it. In one the parents and the youngest child sleep, in the other the grandfather and the eldest boy. These bedrooms are open to criticism, both as regards atmosphere and cleanliness; but the housewife would probably tell us that one pair of hands cannot do everything.

MENU OF MEALS PROVIDED DURING WEEK ENDING MARCH 8, 1908

	Breakfast.	Lunch.	Dinner.	Tea.	Supper.
Sunday .	Coffee with milk, bread, and butter.	Coffee with milk, bread, ham.	Soup, soup meat, chichory, potatoes.	Coffee, with milk, bread, butter.	Bread and cold meat.
Monday .	do.	Coffee with milk, cold bacon, bread.	Soup, fried potatoes, ham, beer.	do.	Ham, bread, and beer.
Tuesday .	Coffee with milk, bread, dripping.	do.	Potatoes and onions, bacon, and ham, bread and beer.	Coffee with milk, bread and dripping.	do.
Wednesday	Coffee with milk, bread, butter.	Coffee with milk, bread, butter.	Leek soup, potatoes, bread, eggs.	do.	Potatoes, bread, beer.
Thursday .	do.	Bread, dripping, coffee with milk.	Potatoes and onions, bacon, beer.	do.	Milk and milk soup.
Friday .	do.	do.	Buttermilk, soup, bread, eggs.	do.	Bread, fried potatoes, beer.
Saturday .	do.	Bread, butter, coffee with milk.	Fried potatoes, bread, eggs, beer.	do.	Bread, butter, coffee with milk.

ADEQUACY OF DIET

As the conditions of the families vary so greatly, some having very little land and others a considerable amount, they cannot suitably be considered as a group, and it will be necessary for the reader to examine the table on the following page in which details regarding each family are given separately.

It will be noted that six of the families are decidedly under-fed, and in the case of four others the selection of food-stuffs is badly adjusted as between protein, fats, and carbohydrates, leading to a deficiency of either protein or calories. The remaining six budgets show a sufficiency of food, and most of them a considerable surplus, according to the Atwater standard of food requirements for men at

THE DIET OF FAMILIES IN CLASS IV. (AGRICULTURAL BUDGETS)

Number of study.	Locality.	Description of Family.				Sufficiency of Diet.				Animal and Vegetable Food.				
		Occupation of Head of Household.	Number in Family.		Protein per Man per Day.	Deficiency or Excess of Protein per Man per Day. ¹	Energy Value per Man per Day.	Deficiency or Excess of Energy Value per Man per Day. ²	Percentage of Protein obtained from		Percentage of Calories obtained from			
			Adults.	Children.					Equivalents to Men.	Animal Food.	Vegetable Food.	Animal Food.	Vegetable Food.	Alcoholic Beverages and Condiments.
54	East Flanders	Weaver, and cultivates 5 acres	2	8	6.6	Grams. +10	Calories. 4380	Calories. +880	36.2	63.3	53.4	66.4	0.2	0.1
55	"	Blacksmith, and rather large farm	5	1	5.4	+55	5428	+1928	47.7	52.3	43.6	50.3	0.1	0.3
56	"	Large farm	7	3	7.6	+21	4277	+777	37.2	62.8	50.6	69.1	0	1.2
57	"	Cultivates 42 acres	3	1	3.8	+49	4880	+880	60.6	39.4	49.4	50.6	0	0
58	"	Fair-sized farm	5	5	6.7	+1	3278	-222	49.2	50.7	40.9	37.9	0	0
59	"	Farm	9	..	8.0	+2	3575	+75	43.4	56.6	37.2	62.8	0	0
60	"	Sabot maker and farmer	5	..	4.8	+1	3440	-60	47.1	50.0	38.9	56.6	4.5	4.5
61	"	Keeper, and cultivates 6 acres	3	2	3.9	-2	3920	+420	48.6	51.3	44.9	53.8	1.3	..
62	Liège	Labourer, and cultivates 1/2 rood of land	2	2	2.5	+39	4728	+1228	24.7	75.3	23.3	76.7	..	..
63	"	Cultivates 11 acres	3	1	3.4	-6	4832	+1882	16.2	83.0	37.8	60.2	2.0	2.0
64	"	Cultivates 10 acres	3	2	3.8	-28	3545	+45	58.8	41.8	37.2	37.5	5.3	5.3
65	Ardennes	Labourer, and cultivates garden	2	8	3.2	-26	3303	-197	21.6	78.4	25.9	74.1	..	..
66	"	Labourer, and cultivates 6 acres	6	..	5.6	-45	2916	-584	48.0	54.0	45.3	58.2	1.5	1.5
67	"	Cultivates 21 acres	8	4	4.3	-21	3657	+57	35.3	63.9	26.4	72.2	1.4	1.4
68	Brabant	Cultivates 12 acres	3	2	3.6	-18	3149	+91	47.6	48.3	48.0	51.9	6.1	6.1
69	"	Labourer, and cultivates a small patch of land	2	6	3.9	-2	4201	+701	15.0	81.3	24.6	70.7	4.7	4.7
Average	..	..	4	2.4	4.7	+2	3932	+432	39.4	59.6	38.0	60.3	1.7	1.7

¹ Standard requirements, 125 grams.

² Standard requirements, 3500 calories.

“moderate” work.¹ Of the four labourers, two are under-fed, one of them seriously so.

Although the number of budgets obtained is too small to allow of any reliable generalisations, the facts ascertained would appear to indicate that the Belgian small holders are quite as well fed as even the highest class of the town workers. Their life is very hard, and their food may be somewhat coarse, but it is, on the whole, adequate. On the other hand, it is almost certain that many of the families of agricultural labourers are seriously under-fed. Indeed, when the low wages paid for agricultural labour are remembered, it is inevitable that there should be under-feeding, unless the labourer is able to obtain land, and is successful in cultivating crops of his own with which to supplement his wages. Fortunately the great subdivision of land in Belgium renders it comparatively easy for labourers to rent a piece of land, and the great majority do so.

It will be noted that upon the average, in the sixteen agricultural budgets examined, about 39 per cent both of the protein and the calories is derived from animal food. This corresponds closely with the percentage in Class III. of the urban budgets, in which 40 per cent of the protein and 35 per cent of the calories are derived from animal sources.

Before closing the chapter the results of this enquiry may be compared with those of a similar one made by the writer in York (England) in 1900 and 1901, in which eighteen families were investigated, divided into two classes: ²—

			s.	d.
Class I.	14 families,	incomes under 26s. weekly . . .	Average 19	8
Class II.	4 „ „	„ over 26s. „ . . . „	38	1

¹ In view of the long hours worked by agriculturists in Belgium and the arduous nature of their work, it is a question whether the Atwater standard of food requirements for men engaged in “active muscular” work should not be adopted, namely, 150 grams of protein and 4500 calories. It will be noted that, according to this standard, thirteen out of the sixteen budgets show a deficiency in total food value, but failure in both protein and calories does not always occur in the same budget.

² Published in *Poverty: A Study of Town Life* (Macmillan).

It will be seen that as regards income these two classes are comparable with Classes II. and III. of the Belgian budgets, whose average weekly incomes are 21s. 11d. and 35s. 3½d. respectively. Class II. in York and Class III. in Belgium are both adequately fed, but it must be remembered that the proportion of families they include is very much larger in England than in Belgium. The writer has no budgets for any class of English workers whose average incomes are as low as those of Class I. in Belgium (14s. 6½d. per week).

It will be worth while to compare the diets of Classes I. and II. (Belgium) in some detail with that of Class I. (York), to discover the differences between them in the choice of food-stuffs, and how the Belgians in Class I. effect their economies. The basis of such a comparison is afforded by the table on p. 389, which refers to the principal food-stuffs only.

It should be pointed out that Class II. in Belgium is composed of the middle section of the working classes, lying between the unskilled labourers on the one hand and the highly paid skilled workmen on the other. But Class I. in York consists mainly of unskilled labourers, and is much larger in proportion to the total working-class population than Class II. in Belgium. Class I. in Belgium is chiefly composed of unskilled labourers, and represents a very large proportion of the working-class population of that country.

COMPARISON OF CHOICE OF FOOD-STUFFS BY CLASS II. IN BELGIUM AND CLASS I. IN YORK

It has already been shown that the families in Class II., Belgium (average income 21s. 11d.), are decidedly better fed than those of the corresponding Class I., York (average income 19s. 8d.).¹ This is not because the cost of food is

	Protein (Grams).	Energy Value (Calories).
¹ Belgian families	113	3190
York ,,	97	2916

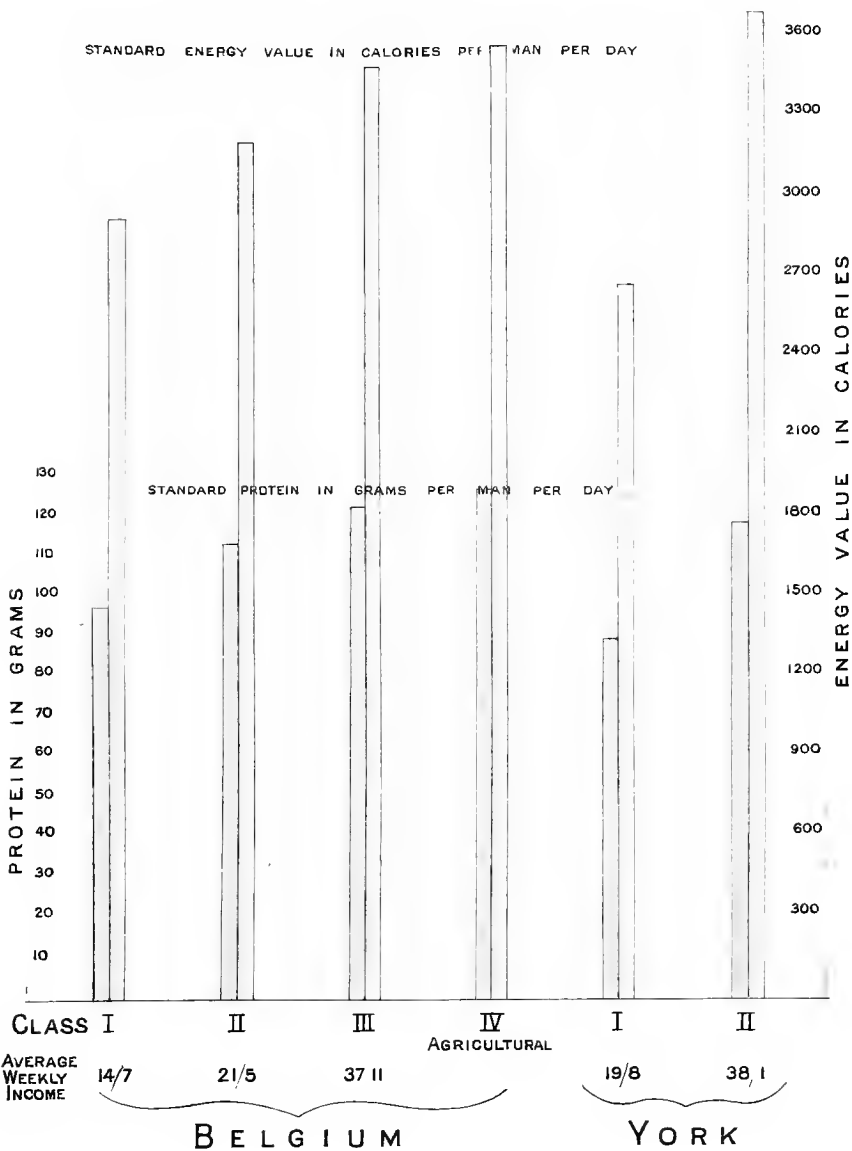
THE NUTRIMENT OF FOUR GROUPS OF BELGIAN AND TWO GROUPS OF ENGLISH WORKING-CLASS FAMILIES COMPARED WITH STANDARD REQUIREMENTS.

YELLOW = ENERGY VALUE
 BLUE = PROTEIN

3900

STANDARD ENERGY VALUE IN CALORIES PER MAN PER DAY

STANDARD PROTEIN IN GRAMS PER MAN PER DAY



AVERAGE WEEKLY CONSUMPTION OF FOOD IN BELGIUM
AND ENGLAND

	Belgium. ¹ Class I.	Belgium. ² Class II.	England. ³ Class I.
MEAT (lbs.)—			
Beef	0·25	0·63	1·04
Mutton . . . . .	..	0·09	0·15
Horse	0·07	..	..
Pork	0·04	0·38	0·17
Other meats	0·03	0·51	0·14
Bacon	0·13	0·10	0·65
Total Meat	·52	1·71	2·15
FISH (lbs.)—			
Fish	0·06	0·58	0·27
FATS (lbs.)—			
Lard	0·08	0·03	0·72
Suet . . . . .	..	..	0·42
Dripping	0·10	0·69	2·87
Butter	0·34	0·52	0·26
Margarine	0·004	0·20	..
Olive Oil . . . . .	..	0·04	..
Total Fats	0·584	1·478	3·72
EGGS AND DAIRY PRODUCE—			
Eggs (no.)	0·8	1·0	1·96
Milk (quarts)	1·59	1·66	2·02
Condensed milk (lbs.) . . . . .	..	..	0·07
Cheese (lbs.)	0·05	0·22	0·09
Buttermilk (quarts)	0·30	..	..
FARINACEOUS (lbs.)—			
Bread	9·90	9·68	0·07
Cake and biscuits	0·18	0·40	0·023
Flour	0·08	0·013	5·94 ⁴
Yeast and meal	0·002	0·02	0·40
Rice, sago, tapioca, semolina	0·13	0·37	0·08
Macaroni	0·002	0·11	..
Total Farinaceous	10·294	10·593	6·513
FRUIT AND VEGETABLES (lbs.)—			
Potatoes	9·20	8·12	2·95
Other Vegetables	1·21	7·82	0·59
Fruit	0·05	0·95	0·24
Total Fruit and Vegetables	10·46	16·89	3·78
SUGAR (lbs.)—			
Sugar	0·09	0·23	1·34
Treacle . . . . .	..	..	0·023
Fruit-Syrup	0·03	0·33	..
Jam	0·04	0·09	0·12
Total Sugar	0·16	0·65	1·483
BEVERAGES (lbs.)—			
Tea . . . . .	..	..	0·11
Coffee	0·16	1·02	0·02
Chicory	0·21	1·50	..
Cocoa . . . . .	..	0·125	0·011
Chocolate	0·003	..	..

¹ Based on study of 15 families equivalent to 60 men.

² " " 15 " " 48 "

³ " " 16 " " 49 "

⁴ Equivalent to 6·9 lbs. of bread.

lower,¹ or the choice of food-stuffs more economical, but simply because 61 per cent of the total expenditure is upon food, as compared with 51 per cent in York. (It must be remembered that the rent is less—11·7 per cent against 18 per cent in York.)

So far as judicious selection is concerned, there is little to choose between the two dietaries. The Belgians, as mentioned elsewhere, get 180 grams of protein and 5138 calories of fuel energy for each shilling spent, as compared with 179 grams and 5585 calories in York. The proportion of food expenditure devoted to animal and vegetable food-stuffs respectively is very similar in the two countries.² The Belgians eat less meat, but more fish, twice as much butter, but only a quarter as much dripping. Taking all fats together, the English consumption is two-and-a-half times greater, and they eat six times as much sugar. But the Belgians are great eaters of bread—even if all the flour bought by the English were made into bread, the Belgians would eat 40 per cent more; while of all farinaceous foods, taken together, their consumption is 63 per cent greater. The contrast between the two countries is also marked in the matter of fruit and vegetables. Of these, the Belgians in Class II. eat four times as much as the English in Class I.

COMPARISON OF CHOICE OF FOOD-STUFFS BY CLASS I. IN BELGIUM AND CLASS I. IN YORK

An object lesson to both the classes considered above is furnished by Class I., Belgium, where the families, though their average income is only 14s. 6½d., are much better

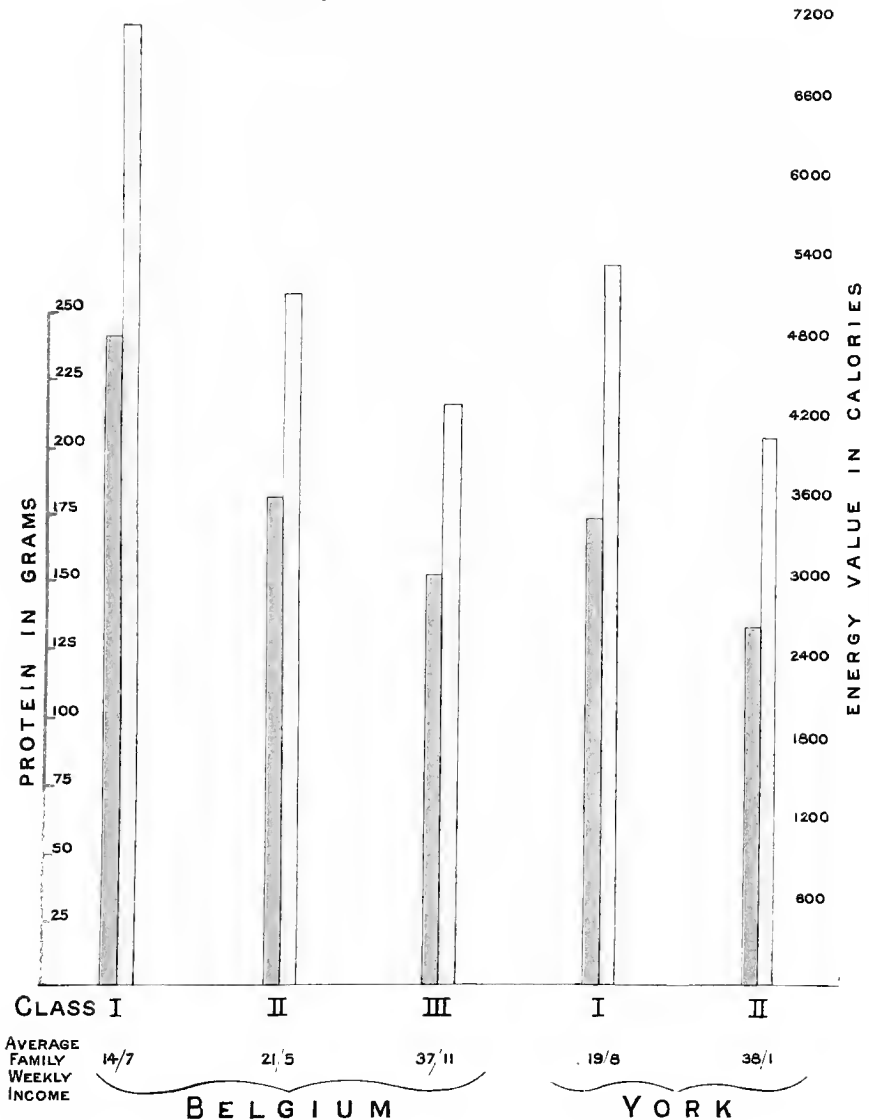
¹ On p. 394 it is shown that in 1908 food-stuffs in Belgium were 6 per cent cheaper than in York. But these York budgets were taken in 1900-1901, when food-stuffs were 8½ per cent cheaper than in 1908, and therefore in this comparison the two countries are on a level.

	Percentage of Total Food Expenditure Devoted to	
	Animal Foods.	Vegetable Foods.
² Belgian families	54½	45½
York „	58½	41½

RELATIVE ECONOMY IN DIETARIES

AMOUNT OF FOOD BOUGHT FOR ONE SHILLING BY THREE GROUPS OF BELGIAN WORKPEOPLE AND TWO GROUPS OF YORK WORKPEOPLE

THE YELLOW COLUMNS REPRESENT THE TOTAL ENERGY VALUE OF THE FOOD BOUGHT FOR 1/- THE BLUE COLUMNS THE AMOUNT OF PROTEIN IT CONTAINS



nourished than families in Class I., York, whose average income is 19s. 8d. It is true that, other expenses being reduced to a minimum, the Belgians spend as much, or a fraction more, on food (10s. 9d. against 10s. 4½d.), but their very marked advantage in nutritive value obtained is due to their choice of food-stuffs. For every shilling they get 240 grams protein and 7124 calories fuel energy, as compared with 179 grams and 5585 calories in York.

The table on p. 389 shows the kind of food they buy. They eat only one-quarter as much meat and fish as the English, and only one-sixth as much animal fat. They have fewer eggs, and less milk and cheese, only one-ninth as much sugar and jam, and one-fifth as much fruit. On the other hand, they have nearly twice as much farinaceous food (10·3 lbs. against 6·5 lbs.), three times as many potatoes, and twice as many other vegetables. Only 42 per cent of their total food expenditure is upon animal foods, compared with 58 per cent in York. Thus we see that the Belgians in Class I. effect their economy by living largely on bread and potatoes, which may not be especially nutritious, but which, being cheap, can be eaten in sufficient quantities to furnish nutritive value. In their dietary hardly any scope is given to their personal tastes; their expenditure on coffee, for instance, is very sparing, though coffee is as popular in Belgium as tea is in England. The Belgians, too, are extremely fond of meat, but the consumption of it in Class I. is practically nil—half a pound per man per week.

The selection of food-stuffs made by the York families, though economical, is less austere. In England people demand a certain amount of gratification of their personal preferences, even if they have to sacrifice some protein and fuel energy to get it.

CHAPTER XXIV

THE COST OF LIVING

IN the previous chapter we have been principally concerned with the standard of living in Belgium. We must now consider its cost, and compare this with the cost of living in England.

The subject is obviously important, for a knowledge of the money wages paid in any country is of small value unless we also know the prices of the principal necessities of life. These may suitably be considered under four heads, viz. food, clothing, fuel, and housing (rent).

As regards the cost of food, the writer felt that to obtain trustworthy figures it would be advisable to have more information than was supplied by the seventy workmen's budgets. A special enquiry was therefore made, for which purpose investigators visited a number of working-class families living in different parts of the country and ascertained the prices which they actually paid for some of the principal necessities of life. Putting aside all returns which seemed in any way doubtful, dependable information was obtained with regard to the food expenditure of 284 families living in fifty-seven different communes. This has been checked by investigations made by the writer himself in many parts of the country.¹ As anticipated, the returns show local variations of price, but these do not appear to follow any definite law. For instance, districts with high and low wages do not correspond with those having high

¹ The Belgian Government publishes periodically a statement of the cost of the principal food-stuffs, but the margins given are in almost every instance so great that for present purposes the figures are of no value.

and low prices, nor do prices rule higher in the Walloon than in the Flemish districts.

The average prices paid in Belgium for some of the principal food-stuffs are given in the following table. For purposes of comparison, the prices paid for similar food-stuffs in England and Wales are also given. These are taken from the Board of Trade Report representing the average prices in seventy-three different towns.¹

To enable the reader better to appreciate the meaning of the figures, the average weekly purchases of the different articles by six working-class families are given, and may be taken as typical.

THE PRICE OF FOOD IN BELGIUM AND IN ENGLAND IN 1908.			DIETARY OF SIX BELGIAN FAMILIES.		
	Belgium.	England.	Average Weekly Consumption of Family.	Weekly Cost per Family.	
				If bought at Belgian Prices.	If bought at English Prices.
	d.	d.		s. d.	s. d.
Sugar ¹ . . .	3·32 per lb.	1·81 per lb.	1·20 lbs.	0 4	0 2
Bacon . . .	7·02 "	7·86 "	2·72 "	1 7	1 9
Butter ² . . .	13·5 "	15·0 "	4·12 "	4 8	5 2
Potatoes . . .	0·35 "	0·43 "	108·56 "	3 2	3 11
Flour . . .	1·40 "	1·40 "	0·92 "	0 1½	0 1½
Bread . . .	1·14 "	1·22 "	138·75 "	13 2	14 1
Milk . . .	2·07 per qt.	3·65 per qt.	12·65 qts.	2 2	3 10
Beefsteak ³ . . .	9·9 per lb.	9·35 per lb.	5·45 lbs.	4 6	4 3
Pork chops ³ . . .	8·4 "	8·18 "	2·25 "	1 7	1 6½
				31 3½	34 9½

¹ The price given for the English sugar is for white granulated sugar. The Belgian article is of a different quality, but the difference in price is primarily due to the fact that the import duty on sugar is higher.

² The English price is for Danish butter, which is that most generally consumed by the working classes. Irish butter, or ordinary English country butter, could be purchased for less money than Danish. The Belgian figures refer to home-grown butter.

³ Beefsteak and pork chops.—In view of the very great difficulty of establishing a reliable comparison between the cost of meat in different towns and countries, the Belgian prices are taken from official figures published in the *Revue de Travail* for November 1908. The writer has made a number of investigations into meat prices, and, while these tend to confirm the official figures, the information supplied is not sufficiently exact to justify him in putting them forward. The prices inserted in the table are the minimum prices for the respective cuts of meat. The maximum prices given for the same cuts are:—

	Belgium.	England.
Beefsteak	1s.	10·13d.
Pork chops	9·6d.	9·25d.

But it must be noted that the maximum prices for England refer only to those actually paid by the working-classes. The writer is aware that the cuts for which prices are quoted are not those most usually bought by the working classes, and he has tried to compare the prices of other cuts, but this cannot be done, as the methods of cutting up the beasts are so different in Belgium and England.

¹ The Belgian figures were obtained in 1908, whereas the English ones as

In considering this table it must be borne in mind that the quality of the articles bought varies, and in consequence the prices and the comparison cannot be put forward as exact. Care has, however, been taken to confine the enquiry to such articles as could be usefully compared, and to eliminate all returns which appeared to indicate that an article of unusual quality, either distinctly worse or distinctly better than the average, had been purchased. It may therefore be assumed that the prices here given refer to such qualities as are most commonly purchased by the working classes.¹ It will be noted that the Belgian prices are slightly lower than the English in most cases, and decidedly lower for milk. On the other hand, sugar is much cheaper, and meat somewhat cheaper, in England than in Belgium, and the price of flour is the same in the two countries. The columns showing the average weekly purchases of the six Belgian families point to the fact that, upon the whole, the Englishman pays about eleven per cent more for his food than does the Belgian. This difference is not great, and it is reduced when we remember that a third of it is in the cost of bread, and that in the north of England the working classes do not buy bread, but make their own, and that flour is the same price in the two countries.

FUEL

Another large item in the working-man's budget is fuel, and it will be of interest to know in which country he spends the larger amount on this item. In order to ascertain the quantity of coal burned upon the average in a Belgian working-class household, and the price paid for it, the writer made investigations in fourteen Belgian towns,

published in the Board of Trade Report refer to October 1905. The writer has, however, been able to obtain information from the English Board of Trade which has enabled him to make allowances for the variations in prices between 1905 and 1908. These make no claim to scientific precision, but any inaccuracy is probably too slight to affect the conclusions to be drawn from a comparison of the two columns.

¹ Except in the case of meat. See note to table, p. 393.

and obtained particulars for 162 families. The enquiry showed that the weekly average was about 1 cwt. of coal in the summer and 2 cwts. in winter, at the rate of 1s. 3d. per cwt. Averaging this consumption in winter and summer, the weekly coal expenditure may be put at 1s. 10d. In an investigation made in York in 1900 it was ascertained that the average weekly consumption of coal per working-class family in that city amounted to 1 cwt. 3 qrs. 14 lbs.¹ The Board of Trade, in the Report already quoted, gives the predominant price of coal in England as 11d. per cwt. on the average in 1905, and enquiry from the same source has elicited the fact that the price in 1908 was about 10 per cent higher, so that the average price of coal in 1908 may be taken as 1s. per cwt. in England as against 1s. 3d. in Belgium. In the latter country, as we have seen, less coal is consumed, and consequently the weekly expenditure in the two countries is the same, namely, 1s. 10d. Evidently the closed stove used abroad is more economical in its consumption than the open grates common in England, but requires a somewhat better quality of coal.

THE COST OF CLOTHING

With a view to ascertaining the cost of clothing in Belgium, the writer and his investigators have personally visited a number of homes, and made careful enquiries of the householders. The method of investigation adopted was to take each article of clothing separately and to find out just what it cost and how long it lasted, and in this way to work out the total annual expenditure. It will be clear that this task required careful handling and a good deal of tact. Altogether, eliminating information which was felt to be in any way unreliable, detailed particulars have been obtained for twenty-seven men and fourteen women in Belgium. For purposes of comparison, the same thing has been done for seventeen men and nine women

¹ 1½ “bags” of 10 stone each.

in York (England).¹ Although the cases investigated are not numerous, they are typical, and the comparison based upon them as to the cost of clothing in Belgium and England respectively may be accepted as fairly accurate.

THE COST OF CLOTHING

Men's yearly expenditure on clothing

	In Belgium. ¹	In England. ²	Excess of English Expenditure over Belgian.
	s. d.	s. d.	per cent.
Footwear (boots, shoes, and sabots)	11 10	20 0	69
Socks	2 5	3 8	52
Underwear	3 6	9 10	181
Neckties, mufflers, collars, and handkerchiefs	1 2½	6 1	403
Suits, overalls	13 5	31 6	135
Overcoats	0 7½ ³	3 7	473
Hats and caps	1 5½	2 7	77
Total	34 5½	77 3	124

¹ Average of twenty-seven cases.

² Average of seventeen cases.

³ This average is explained by the fact that only seven of the men have an overcoat.

Women's yearly expenditure on clothing

	In Belgium. ¹	In England. ²	Excess of English Expenditure over Belgian.
	s. d.	s. d.	per cent.
Footwear (boots, shoes, clogs, and slippers)	7 10	7 7	..
Stockings	2 2	2 1	..
Underwear and nightdresses	3 0	6 2	106
Hats and shawls	0 11	2 9	200
Dress	8 9	12 1	38
Jackets . . . . .	..	3 4	(not worn by working people in Belgium).
Corsets . . . . .	..	2 5	do.
Aprons	2 5	2 7	7
Petticoats	1 6	2 4	56
Total	26 7	41 4	55

¹ Average of fourteen cases.

² Average of nine cases. Investigation in York kindly made for the writer by Miss Lidgett in 1909.

It will be noted that for the men the expenditure upon clothing in England is twice as high as in Belgium, and

¹ The Belgian returns were obtained in 1907 and 1908 and the English ones in 1909. Practically all the returns refer to families belonging to the poorer section of the working classes.

for the women it is half as high again. The figures do not fully reveal the cause of this difference, but the writer's own detailed observations enable him to say confidently that it arises chiefly from the fact that the standard of comfort in the matter of clothing is much higher in the former country. It is possible that the Belgian can buy certain articles a little more cheaply than the Englishman, but such variations, even if they exist, are unimportant.

If the table be examined in detail the contrast between the two countries becomes evident. Taking the men's clothing first, the great difference in the cost of footwear and underclothing is due primarily to the fact that the Belgian wears wooden sabots when at work, and his underclothing is confined to a shirt, whilst the Englishman uses leather boots, and also pants and undervests. Again, the latter spends four times as much as his foreign fellow-workman on neckwear, collars, and handkerchiefs. Much of his expenditure on these articles is not imperative, but incurred for the purpose of keeping up appearances. The Belgian workman is obliged to confine himself to such clothing as is absolutely necessary, and he has no margin for luxuries. His working clothes consist of overalls of cotton or some other inexpensive material, his cloth suit being reserved for Sundays, and lasting an almost incredible number of years. Again, the Englishman often has an overcoat where the Belgian contents himself, even in winter, with a thick flannel muffler. In the writer's opinion there is little doubt that many of the Belgian workmen are under-clad in winter-time, and some of them must suffer considerably from cold.

Turning to the women's clothing, it is interesting to notice that for footwear and aprons the expenditure in the two countries is almost identical. Probably the reason is that in both, expenditure has been brought to what is considered to be an irreducible minimum. In other matters, the higher standard of comfort in England is very noticeable. For instance, the Belgian working woman, unless particularly well-off, hardly ever wears a hat, corsets, or a jacket, and in the matter of underwear she reduces

her requirements to the utmost. It is an interesting fact that the average expenditure upon clothing of the fourteen Belgian women, namely 26s. 7d., almost exactly coincides with the figure which the writer arrived at as being the lowest sum upon which a woman could clothe herself in England in such a way as to maintain health and to be sufficiently respectable to go out to work, namely 26s.¹ It should be remarked that although the nine families investigated in York in 1909 were all poor, the average figure for women's clothing is considerably above this minimum, indicating that even the poor insist upon a standard of comfort which allows a margin beyond absolute necessities. In Belgium this margin does not appear to exist.

The last important item of working-class expenditure which calls for comment is *Rent*.

As this is fully discussed in the chapter on Housing, it will be sufficient here to note that rents are much lower in Belgium than in England. While, of course, they vary greatly from town to town and from district to district, and although in most places they are higher now than ten or twenty years ago, it may be roughly stated that with the exception of Brussels and Antwerp, a good four-roomed house may be had for about 2s. 7d. per week in the Flemish, and 3s. 4d. in the Walloon towns. Inferior houses with the same number of rooms can be had for less money.

Having compared the cost of living in Belgium and in England, we may now try to establish for the former country a figure which may be regarded as the minimum upon which physical efficiency can be maintained, and to compare this with the corresponding figure for England. The writer is well aware that such a figure cannot be scientifically precise. Food requirements vary with personal idiosyncrasies as well as with body weight and severity of work, and the study of dietetics is still in its infancy. Still, the establishment of a minimum even approximately correct may be extremely valuable. It may help thoughtful

¹ See *Poverty: A Study of Town Life*, B. S. Rowntree, page 108.

employers to determine whether the wages they are paying constitute "living" wages, and enable us to say whether any given families possess a margin of income available for thrift, or whether, in expecting them to save money, we are expecting what can only be done at the cost of physical deterioration. It will help us to decide how much of the poverty in a community is due to waste and how much to sheer inadequacy of income. Other issues will occur to the reader, but perhaps these are the most important.

The items of expenditure which must be considered in connection with this minimum sum required for the maintenance of physical efficiency are food, clothing, housing, fuel, and household sundries. In establishing the standard only absolute necessities will be considered—no luxuries of any kind. We shall not include occasional expenses, such as medical attendance or burial of the dead, still less, contributions to trade-unions or churches, the purchase of books or newspapers, or recreation and travelling; so that the standard is one of the utmost severity. The writer wishes to make it clear that he fixes the minimum at so low a point, not because he feels that this standard of life should be imposed upon any section of the community, but because, after physical efficiency has been provided for, the margin to be allowed for the other needs of humanity is determined by ethical rather than economic considerations. No one, however, will dispute that something should be added for meeting these needs.

1. FOOD

In establishing the minimum sum necessary for the provision of a diet just sufficient for the maintenance of physical efficiency, the dietary selected is that provided at the semi-penal labour settlement of Merxplas. This is practically a vegetarian diet; only 4 oz. of bacon and 4 oz. of butcher's meat are included in it weekly as a flavouring to the soups. There is no tea, no coffee, no beer. Breakfast consists of a decoction of chicory and water, with

a little skimmed milk, and bread and dripping. The other meals are vegetable soups and bread, nothing more.¹ No one will maintain that such a dietary is too luxurious to be adopted as a guide to our required minimum for food. It provides 127 grams of protein and 3550 calories of fuel energy per man per day, which is almost exactly the Atwater standard for men doing moderate work. It is assumed that the cost of a woman's dietary is four-fifths, and a child's dietary about one-half that of a man.² In pricing the food stuffs the average prices actually paid by working people in Belgium are given. These, it will be remembered, were ascertained by the writer's investigators, in fifty-seven communes in different parts of the country. The total cost is 2s. 7¼d. a week for a man, 2s. 1d. for a woman, and 1s. 5d. for a child, which amounts may be taken as the minimum upon which the food necessary for the maintenance of physical efficiency can be purchased in Belgium.

2. CLOTHING

In fixing the minimum sum required for clothing we have considered what is absolutely necessary to keep the wearers sufficiently warm for the maintenance of health and sufficiently respectable to enable them to obtain decent employment, but nothing has been allowed for any kind of luxuries. The investigation described on p. 397 shows that for women the amount spent is the minimum. There is practically no margin for further economy, and we may

¹ The food value of the Merxplas dietary falls a little short of the Atwater standard for men doing moderate work (125 grams of protein and 3500 calories of fuel energy per day), the fact being that the bulk of the inmates at Merxplas are old men who do but little work. Before adopting this dietary as the standard for present purposes, a small amount of bread and dripping was added to the actual dietary in order to supply the deficiency in food value.

² It is difficult to establish with accuracy the minimum necessary cost of a child's dietary. As this should, in the case of young children, comprise a considerable amount of milk, it will be more costly, in proportion to its food value, than that of adults. If there is an error in fixing the average cost of children's dietary at about one-half that of adults, this is probably in the direction of under rather than of over statement.

therefore take the average expenditure of the fourteen cases investigated, namely 26s. 7d., or say 26s., as being the smallest sum upon which a woman in Belgium can clothe herself for a year. In the case of the men we find a certain margin of expenditure not strictly justified by the stern rule laid down above. If all amounts not absolutely necessary be deducted from the sums which these men actually paid, we arrive at 26s. as the minimum annual expenditure for men. It is an interesting fact that although the work was done by different investigators, and entirely without reference to any previous inquiry, the minimum expenditure for clothing in Belgium coincides for men and women with the sum which the writer found to be necessary in England.

As regards the cost of clothing children, he has only made a few investigations in Belgium, not enough to permit of the calculation of an average. But his English investigations showed that 22s. might be taken as the minimum which must be allowed on the average for children of different ages. It must be remembered that although each article of clothing costs less, children wear their clothes out much more rapidly than do adults. It will be safe to assume that the proportion between the clothing of children and adults in Belgium is the same as in England.

3. HOUSING

It is impossible to fix a minimum expenditure upon rent, as this varies so greatly from town to town, but for a house in which a family of average size can live in a state of physical efficiency the average figure of 2s. 6d. is certainly not too high.

4. FUEL

There is seldom wasteful expenditure on fuel on the part of the working classes. The average expenditure in Belgium may therefore be safely taken as representing the minimum, namely 1s. 10d. per week per family.

5. HOUSEHOLD SUNDRIES

In fixing a figure which represents the necessary expenditure for all household sundries not included above, it is obviously impossible to pretend to perfect accuracy. In England the writer adopted the figure of 2d. per week per head to cover all sundry expenses in the household. This is certainly not an over-statement, and may safely be adopted for the Belgian estimate. The household sundries to be purchased include all replacements of furniture and bedding, the purchase of soap, the payment for gas or oil for lighting purposes, etc., etc.

Adding all these figures together, we arrive at the following as the minimum sum upon which a family of five persons can be maintained in a state of physical efficiency in Belgium :—

	s.	d.
Food	8	11
Clothing	2	3
Rent	2	6
Fuel	1	10
Household sundries		10
	<hr/>	
	16	4

Bearing in mind the exceedingly severe conditions which regulate this minimum, it may be confidently asserted that any family whose total income from all sources falls below it must in the long run suffer physical deterioration ; and it is important that the Belgian people should recognise this fact, especially as the weekly wages of a large number of their unskilled labourers amount to less.

It will be interesting to compare the minimum cost of living in Belgium with the figure established by the writer in York (England). He showed that the minimum expenditure necessary to maintain in health a family of five was as follows :¹—

¹ The actual estimate was made in 1901, since which year the cost of food-stuffs has risen by about 8½ per cent. Allowance has been made in the figures for this rise.

	s.	d.
Food (2 adults @ 3s.) 6s. + 8½ per cent	6	6
Food (3 children @ 2s. 3d.) 6s. 9d. + 8½ per cent	7	4
Clothing (2 adults @ 6d.)	1	0
Clothing (3 children @ 5d.)	1	3
Rent, say	4	0
Fuel (1½ bags @ 1s. 3d.), say	1	10
All other sundries @ 2d. per head		10
	<hr/>	
Total	22	9

It will be noted that the minimum cost of living in Belgium is 28·2 per cent lower than in England.

As has already been pointed out in this chapter, this is not due to the comparative cheapness of food-stuffs in Belgium. It is due principally to two causes. First, the national customs permit of a cheaper selection of food-stuffs in Belgium than in England; for although the English figure is based upon a dietary more stringent than is provided in any workhouse in England or Wales, it is much more costly than the dietary which fixes the Belgian standard.¹ The latter, if adopted among the inmates of an English workhouse, would lead to insurrection. The second reason which accounts for the smaller minimum expenditure in Belgium as compared with England is that rents are less. Four shillings per week are allowed in the English standard as against half a crown in Belgium.

In his estimate of 16s. 4d. as the lowest sum upon which a family of five can be maintained in a state of physical efficiency in Belgium, the writer has not forgotten that there are local differences in the cost of living; but the prices at which all food-stuffs are charged in the estimate and the amount allowed for rent are clearly set forth, and consequently it is not a difficult matter to adjust the figures accurately in accordance with the actual prices ruling in any locality. If those who live where certain goods can be purchased more cheaply are inclined to think that the estimate is too high, the writer would again like to remind

¹ The dietary adopted in fixing the English standard provides 243 grams of protein and 6520 calories for a shilling expenditure, whereas the Merxplas dietary adopted for the Belgian standard provides 330 grams of protein and 9245 calories of fuel energy.

them of the stern conditions by which it is governed. It is concerned solely with the absolute necessities for the maintenance of merely physical efficiency. It allows not a farthing in the course of the whole year for those little luxuries and recreations which are really essential to human life in a modern civilised state. Any reader who contends for a slightly lower allowance of protein, fats, and carbohydrates should consider what life would mean lived in accordance with the standard here put forward. We must clearly understand what "merely physical efficiency" means. "A family living upon the scale allowed for in this estimate must never spend a penny on railway fare or omnibus. They must never go into the country unless they walk. They must never purchase a halfpenny newspaper or spend a penny to buy a ticket for a popular concert. They must write no letters to absent children, for they cannot afford to pay the postage. They must never contribute anything to their church or chapel, or give any help to a neighbour which costs them money. They cannot save, nor can they join sick club or Trade Union, because they cannot pay the necessary subscriptions. The children must have no pocket-money for dolls, marbles, or sweets. The father must smoke no tobacco, and must drink no beer. The mother must never buy any pretty clothes for herself or for her children, the character of the family wardrobe, as for the family diet, being governed by the regulation, 'Nothing must be bought but that which is absolutely necessary for the maintenance of physical health, and what is bought must be of the plainest and most economical description.' Should a child fall ill, it must be attended by the parish doctor; should it die, it must be buried by the parish."¹

Further, let the reader remember that in adopting the standard the writer has assumed that the housewife possesses a complete and scientific knowledge of the dietetic value of different food-stuffs. When these facts are borne in mind it will surely be admitted that even if in any locality goods might be purchased for a trifle below the sum named in the

¹ *Poverty: A Study of Town Life*, B. S. Rowntree, pp. 134-135.

estimate, or the allowance of food-stuffs were a trifle more than was absolutely essential, still the margin which must be added to the estimate to allow for the simplest life which any thoughtful and reasonable person would consider adequate would far outbalance any savings which could possibly be effected.

CHAPTER XXV

CO-OPERATION¹

It may be asked whether co-operation plays any great part in the lives of the working-classes in Belgium. The modern co-operative movement there dates from the rise of the "International" in 1868. Previous experiments in co-operative production, notably those begun in the revolutionary decade ending 1848, were short-lived. In 1873 the legislature granted certain privileges to co-operative societies; this gave some encouragement to the tendency, and the first society of any importance was founded in Ghent in that year. Although largely consisting of Socialists, it was at first non-political in character; but under this form it soon came to an end, and some of the Socialist members established, in 1880, a society called "The Forward" (*Vooruit*), which still takes a leading place in the Belgian co-operative movement.

In strong contrast with Britain, the co-operative movement in Belgium is primarily political in character, and is more important as an educational than as an economic force. The different societies may be classified under four headings—Socialist, Catholic, Liberal, and Neutral, the last-named group being but small.

As there is no unity between the different groups, there is a complete lack of statistics dealing with the movement as a whole; but the main facts can be stated. While agricultural co-operation is almost entirely controlled by

¹ Agricultural co-operation and co-operative credit, having been dealt with in Chapters XVIII. and XIX., are not examined here. This chapter is confined to co-operative production and co-operative stores.

the Catholics, other political parties having as yet failed to establish any footing in the rural districts, in the towns the Socialists have very largely captured the movement, and their societies are much more important than those of all other parties put together.

There are about 200 Socialist co-operative societies in Belgium, of which 162, including all the important ones, are grouped in a Federation which publishes statistics. From these we learn that in the year 1906 the entire sales amounted to £1,360,000, and realised a profit, which was distributed among the members or used for educational and political purposes, of £140,000. The total membership of the societies was 127,000, and the sales per member £10 : 11s.¹ The total staff employed by the societies numbered 1809, and the value of their properties was £520,000. About half of the business of these 162 societies was done by the seven largest: Brussels coming first with a turnover of £200,000, then Ghent with £140,000, and Haine - St. - Paul (in a mining and engineering district) with just over £120,000. The great majority of the Socialist societies (135) are found in the Walloon part of the country. This is not surprising, as the party is much stronger there than in North Belgium.

The failure of the Catholics to establish their co-operative societies firmly in the towns is principally due to three causes :—

1. They are not unanimous in their desire to further co-operation, since a number of them fear to offend the tradesmen, among whom they have many allies.
2. They were too late in the field, the Socialists having secured a firm footing before any serious attempt to establish co-operative societies was made by the Catholics.

¹ In 1904 the total membership of the 1907 distributing societies in England and Wales which made returns was 1,881,000, while their total sales amounted to £73,714,000, so that the sales amounted to £39, 4s. per member, as compared with £10, 11s. for the 162 societies in Belgium. The English membership is equal to 5·6 per cent of the whole population. Even if we assume the total Belgian membership to be twice that of the 162 Socialist societies, it would still only equal 3·6 per cent of the whole population, or two-thirds of the proportion in England and Wales.

3. Their societies are not so entirely democratic in character as those organised by the Socialists.

The largest Catholic society is that of Charleroi, established in 1891. It was the first to be opened, and now has a membership of 9000. With a mention of the societies at Houdeng Goegnies (Hainaut) and Ghent, which have respectively 2500 and 1500 members, and whose sales are £8000 and £16,000, the list of Catholic societies of any moment is complete, unless two concerns not strictly co-operative, but having the same object, be included—one at Antwerp with 5000 members, and another at Mariemont. These are actually limited liability companies, but are established on a basis whereby, after a reasonable interest has been paid on the capital, the remaining profits are distributed among the purchasing members.

The importance of the Liberal societies is even less. Mention need only be made of one at Antwerp with 11,000 members, and others, much smaller, at Ghent, Malines, and Brussels. The neutral societies are unimportant. The only one of any moment is the "Chem Postel,"¹ the membership of which is confined to civil servants, principally to those in the Railway and Postal Services.²

Co-operative societies in Belgium differ widely in character from those in Britain. The baking and sale of bread is by far their most important commercial undertaking, another extensive one being the brewing and sale of beer. Forty per cent of the Ghent society's total receipts are for bread, one hundred tons of which are baked weekly; and the Brussels society sells bread annually to the value of £104,000, a sum representing more than half of its total income. Many societies have first been established simply as bakeries, other branches, notably grocery and drapery stores, gradually developing around the bread-baking business. But while the development of bread-baking has been rapid, the other branches advance slowly, and would advance more slowly

¹ *(Chem)ins de fer, (Post)es et (Tél)égraphes.*

² There are some societies for the supply of medicines at cheap rates, but these are more in the nature of Friendly Societies.

still but that in some societies, for instance Ghent and Brussels, the dividends upon purchases are not given in cash, but in coupons exchangeable for goods at the society's stores.

It has already been stated that the importance of the co-operative movement is less economic than political; and there is no doubt that in the latter sphere its influence is considerable. The stores, besides being focus points for co-operation, are centres of political and social life. The "Maison du Peuple" at Brussels, and the "Vooruit" at Ghent, are spacious and handsome buildings in the heart of the city, with large and well-equipped recreation halls, gymnasia, restaurants, meeting-rooms for all kinds of clubs, and the offices of the leading trade unions and friendly societies, as well as libraries. Some of the large societies give old-age pensions to their members, usually payable at sixty years of age, and varying in amount according to the value of the goods purchased. Many of them encourage the formation of sick clubs, insurance societies, and similar institutions among their members, who, being touched at so many points, tend to become closely united to the political party with which the societies are connected. Indeed, it may be said that membership of a co-operative society in Belgium, to many working people, is almost like membership of an active church. Both mean all kinds of clubs and varied social interests, as well as participation in more serious work.

A large share of the profits of the societies goes directly to party funds, and here, too, the political significance of the movement is considerable.¹ Not a few strikes have been largely financed either by loans or gifts made by co-operative societies. As an element in social education, the lessons in self-government learnt in connection with their management have been most valuable; and, moreover,

¹ This fact is so fully recognised that very active steps are sometimes taken to prevent the growth of co-operative societies. The writer has been told of a town in East Flanders where people had been turned out of their houses by their Catholic landlords because they refused to give up their membership in the Socialist Co-operative Society.

their leaders are alive to the importance of developing the intellectual life of the members. It is a common thing to hear of good lectures and concerts given by the larger societies. The influence of the leaders is also strongly used in favour of Temperance. It is a rare exception for spirits to be sold in the cafés and restaurants attached to the co-operative halls, the customers being encouraged to drink light beer or non-alcoholic beverages.

It will be seen from this chapter that the co-operative movement in Belgium is still in its infancy. Its political character, while a source of strength in some ways, often leads to wasteful division of forces and to expensive management; but many of the societies are flourishing, and it seems likely that co-operation will play an increasingly important part in the social economy of the country.

CHAPTER XXVI

THE DRINK PROBLEM

IN any survey of the social condition of a nation a consideration of the drinking habits of the people must find a place. In this chapter it is proposed to treat this subject only so far as is necessary to show whether Belgium is a temperate or an intemperate country, and especially whether any large percentage of the income of wage-earners is spent in drink.

Unfortunately for Belgium, her consumption of alcohol is very high. Upon the average, every Belgian consumes annually 1·06 Imp. Galls. of spirits (50°), 1·05 Imp. Galls. of wine, and 49·37 Imp. Galls. of beer.¹ While the consumption of spirits per head of the population in many European countries exceeds that of Belgium, her *per capita* consumption of beer is almost 50 per cent in advance of any of them; and if we take all alcoholic drinks into consideration, and speak of them in terms of absolute alcohol contained, we find that the Belgians consume more absolute alcohol per head than any other nation in Europe, with the sole exception of France.²

¹ These figures represent the average for the years 1903 to 1907. The figure for spirits is expressed in its approximate equivalent of British proof spirit, *i.e.* 50 per cent of alcohol by *weight*, and 57 per cent by *volume*.

² *Per capita* consumption in 1906 :—

	Imperial Gallons.			
	Wine.	Beer.	Spirits.	Absolute Alcohol.
France . . .	3·12	0·33	0·78	4·23
BELGIUM . . .	0·11	2·06	0·62	2·79
Italy . . .	2·51	0·01	0·16	2·68
United Kingdom . . .	0·04	1·40	0·51	1·96
Germany . . .	0·08	1·04	0·82	1·94

In calculating the quantity of absolute alcohol for the above table, the

To be always thirsty, everywhere, and under all circumstances, seems to be the national characteristic of the Belgian. For him every occasion justifies a drink: he drinks in the morning to awaken himself and to "pull himself together," before dinner to get up an appetite, and after dinner to aid digestion; after working hours to restore his energy, and before retiring to make him sleepy. He drinks on Saturday because it is pay-day, on Sunday because it is rest-day, and on Monday because it is the "morrow of yesterday." He drinks when he is sad, and when he is gay he drinks more. He drinks for consolation and for enjoyment, because his affairs go well, or because they go badly, because he has inherited from an uncle or because an aunt has left him nothing.¹

Almost universally, hospitality is offered in the form of alcoholic liquor of one kind or another. In the writer's experience it is the exception to call at a house, especially in the Walloon district, without such an invitation, no matter what the time of day may be, even if it is eight o'clock in the morning. In the country districts a man's standard of life is not infrequently described in terms of the kind of drink which he offers to callers. "Ten years ago," you may be told, "so-and-so received his visitors with beer; now he receives them with Burgundy."

The principal causes for the high consumption of alcohol are not far to seek. The chief one is the enormous number of opportunities for drinking, not only in the towns, but in the country districts. Upholders of the present system of unrestricted licensing maintain that it would be contrary to the Belgian conception of liberty to limit by law the number of licences or to refuse the right to open a public house to any respectable applicant, and, therefore, public

alcoholic strengths of spirits have been reduced to a common basis of proof spirit, which contains 50 per cent of absolute alcohol reckoned by *weight* and 57 per cent reckoned by *volume*.

In calculating the absolute alcohol in beer, the figures have been worked out on the basis that British beer contains on the average 5 per cent of absolute alcohol, and beer in every other country 4 per cent.

Wine has been taken at 15 per cent for the United Kingdom, 12 per cent in Italy, and 10 per cent elsewhere.

The above alcoholic strengths refer to *volume*, not to *weight*.

¹ From an address delivered by Baron R. du Sart de Bouland, Governor of the Provincial Council of Hainaut, at the opening of the session, July 7, 1903.

houses abound on every hand.¹ In some working-class districts they are so plentiful that as one walks along the road it seems as though every third or fourth house were a *cabaret*, and the casual observer wonders whether they can all sell enough liquor to make it worth while to keep open. Of course they are widely different in character from the English public houses. Probably more than half are kept by industrial workmen and their wives, the profits yielding only a small addition to the family income. To keep a *cabaret* means to take a house somewhat larger than would otherwise be taken, and to devote the front room to the sale of drink. During the day the wife is occupied with her household duties, and only comes into the *cabaret* proper when she hears a customer has arrived. Sales are chiefly made at the week-ends; during the rest of the week comparatively little business is done in the smaller shops. In the case of one in Eecloo, the accounts of which the writer had an opportunity of seeing, the sales averaged $16\frac{1}{2}$ gallons of beer and $5\frac{1}{4}$ pints of gin (*genièvre*) a week. The gross profits amounted to about 8s. 9d. a week. Various expenses must be met out of these gross profits, such as extra rent, light, heat, cleaning, and special taxation; and in many cases there would be even less trade done than by the one in Eecloo. M. Varlez, in his report on the cotton-workers of Ghent, estimates the net profits derived from the little *cabarets* kept by the wives of the cotton-spinners at a sum not exceeding 4s. a week;² and probably in the small towns and villages they are even lower. Hence it is

¹ The Minister of Finance, in a series of notes serving as an introduction to a new licensing measure, writes on January 14, 1907: "One cannot dream of legally restricting the number of public houses. Any legislation for such a purpose would be contrary to the spirit of professional and commercial liberty. It would be arbitrary, for it could not be based upon any fair or rational foundation. The method of accomplishing this object which naturally suggests itself, is the imposition of licence duties." In spite of this view, the Belgian Government has passed a law in 1906 prohibiting the making, the importation, and the sale of absinthe. An official investigation in 1900 showed that the total production of absinthe in Belgium amounted to something like 11,000 gallons per annum, to which must be added imports, especially from France and Switzerland, the volume of which is unknown, as they were included under the general heading of "liqueurs."

² *Les Salaires dans l'industrie gantoise*, i. p. 205.

clear that these *estaminets* are very different in character from the English public houses; though, on the other hand, there are many large cafés where considerable quantities of drink are consumed.

The English reader must also remember that the *cabaret* and the café enter into the life of the people in a way unknown in England. Especially in small towns they are the centres of the social life. Professional men meet each other daily at one café, tradesmen at another, and working men at a third; and hear and tell the news, or play cards or dominoes.

Altogether there were on March 1, 1907, no less than 210,310 establishments in Belgium registered for the on-sale of drink. Of these, 95,156 were registered for the sale of alcoholic beverages other than spirits, the remainder, 115,154, for the sale of alcoholic drinks, including spirits.¹ There is thus one "fully licensed" house for every 64 of the population, in addition to one "beer-house" for every 77 of the population; or, taking the two together, one establishment registered for the on-sale of liquor for every 35 of the population.²

The public houses are, of course, not equally distributed over the whole country. In some districts there is one public house for every 19 of the population, or about one for every six adults. When it is stated that in England and Wales the average number of "on" licences, including beer-houses, is equal to one for every 270³ of the population, we realise how much more numerous are public houses in Belgium than in England. Their ubiquity is not restricted

¹ It is well known that a number of houses registered only for the sale of beer, wine, and cider, sell spirits fraudulently. Thus the actual number of houses where spirits may be obtained is greater than would appear from the official figures.

² The Belgian law does not require establishments for the "off" sale of beer, wine, cider or spirits (unless the last named are sold in quantities of less than 3½ pints) to be either registered or licensed. The number of such establishments is unknown, but is probably not great. The licence duty imposed on spirit sellers (see note 1 on p. 415) applies to all who sell spirits in quantities of less than 3½ pints, making no distinction between "on" or "off" sale.

³ On January 1, 1908, *Licensing Statistics*, Cd. 4612.

to the towns, but is equally marked in the country districts.¹

The number of brewers in Belgium is very great, being not less than 3375 in 1906.² Many of them own or control public houses, but the "tied house" system can never become a serious difficulty in a country where practically any one may open a *cabaret*.

Not only is the number of public houses in Belgium more than ten times as great, in proportion to the population, as in England and Wales, but they are practically unrestricted in regard to the methods of sale they adopt. So far as national legislation is concerned, they may keep open as long as they like on every day of the year, and they may have back doors and side doors without limit. They may also use any device they choose to attract custom. They are subjected to no special inspection—only to one, which is shared by all purveyors of food-stuffs, namely, that of the food inspector, to see that the quality of their liquor is up to the required standard. Almost the only regulation imposed by the national legislation is that which forbids the serving of alcoholic beverages to children under sixteen years of age, but in practice it is seldom enforced. Apart from this, what restrictions are imposed depend upon the communal authorities, each of which may make special conditions if it chooses. As a matter of fact, many communes have adopted bye-laws regulating the hours of closing; but these are, as a rule, administered very laxly.

¹ The great number of public houses in Belgium is in part due to the fact that prior to 1889 no licence duty at all was demanded. In 1889 a law was passed imposing a licence duty for the sale of spirits in quantities of less than $3\frac{1}{2}$ pints. This did not, however, apply to the sale of beer and wine, and was only made applicable to houses opened after 1889. The licence duty varies from a minimum of forty-eight shillings in communes with a population of under 5000, to a maximum of eight pounds in communes of over 60,000 inhabitants. This law has already had some effect in reducing the number of houses where spirits are sold. In 1907, the licence duties produced £191,370, which has been applied by the Government in relief of local rates. The relief is granted to the communes on a population basis, and quite independently of the number of local spirit licences. Many of the communes and provinces also levy taxes on public houses, but the rate of these is not high. See Appendix, p. 597.

² *Annuaire statistique*, 1907, p. 354.

Thus the town of Ghent has passed a bye-law that all public houses shall close at midnight; but in a letter on this subject addressed to the writer, and dated May 1908, a gentleman residing in Ghent says:—

The rule is very indifferently applied; and there are many cafés—well-conducted ones among the number—where it is absolutely ignored. It is intended to be a means of eventual coercion rather than a law to be rigorously enforced. The “night wanderers” of Ghent would be terribly put about if the public houses were actually closed at midnight. Such a regulation would be out of harmony with our traditional customs.

Similarly in Brussels, the general rule that public houses must be closed between midnight and six A.M. is relaxed by the city authority in the case of establishments known to be thoroughly respectable, if they choose to ask for an exemption. The Burgomaster may allow them to keep open until two A.M. or to open at four or five A.M., but a single complaint suffices to induce the authority to withdraw such special permission. Apart, however, from the fixing, or nominal fixing, of the hours of closing, the conditions imposed upon publicans by the communal authorities are very few. Here, as in all places of public resort, including ordinary shops, the police have the right of entry “to take action in case of disorder,” and conditions regarding the premises may be imposed, so far as these are called for by necessities of public health; but special restrictions are rare.

Another fact which accounts for the large consumption of alcohol is its cheapness. The beer ordinarily drunk, which is, of course, lighter than the English, can be bought almost everywhere for a penny a glass, containing about half-a-pint, while the *petit verre* of gin¹ (*genièvre*), the popular national spirit, costs a halfpenny. Comparing beers of equal strength, the excise duty in England is nearly three times as high as in Belgium. But as the Belgian beer is lighter than the English, the duty per gallon is considerably less than a third of that payable in England. The duty on

¹ Usually containing about 1·90 centilitres (·033 pint).

spirit in Belgium is little more than one-half of that levied in England, viz. 6s. 2d. per gallon of British proof spirit, as compared with 11s.¹

The Temperance movement in Belgium is only of recent date. In 1886 the Government of West Flanders, replying to a Government Commission, was obliged to report:—

There are, in our province, few districts where the working-class population is not deeply contaminated by intemperance. It is especially prevalent among the lower classes. It attacks both sexes, but especially the men. Gin is the drink most generally consumed by habitual drinkers. Drunkenness is on the increase. Poverty, wretchedness, the lack of education, and the low moral standard are the causes. No special efforts have been made to our knowledge to prevent or combat the habits of intemperance.²

It was only about twenty years ago that the people of Belgium began to touch the problem of intemperance. Now there are nineteen temperance societies with many local branches and a considerable membership. But it must be borne in mind that, with very few exceptions, they only seek to check the consumption of spirits. They neither preach nor demand from their members abstinence from wine and beer, though they advocate temperate use of these beverages, and as a consequence the number of total abstainers in Belgium is insignificant.³ Besides granting the right to free postage to the principal temperance societies, the Government votes £3400 annually to temperance work. Most of this is devoted to the societies, the rest to work directly undertaken by the Government in schools and elsewhere.

The efforts made by the Government to encourage temperance teaching in the schools are worthy of note. In

¹ Ordinary beer sells in casks for about 5½d. per gallon, or by the glass for 1s. 1d. to 1s. 3d. per gallon. It contains about 3 to 3½ per cent of alcohol by weight, equivalent to about 3½ to 4 per cent by volume.

² *Commission du travail institutée par arrêté royal du 15 avril, 1886. Réponses au questionnaire*, vol. i. (Bruxelles, Lesigne, 1887), p. 1089.

³ In this respect the present position of Belgium is similar to that formerly existing in Scandinavia. When the well-known Gothenburg system was introduced, beer was looked upon as a temperance beverage, and its sale was not restricted. Now strong efforts are being made in Scandinavia to control its sale in the same way as that of spirits.

no other country has this teaching been so strongly developed. It not only forms part of the minimum curriculum of lessons in hygiene imposed on all schools in receipt of Government grants, but special efforts are made to render it as complete as possible. In a circular of 1898, the Minister of Education recommended all head masters of primary schools to devote half an hour per week in the higher standards to temperance instruction alone, and to insist on notes being taken by the scholars, in special exercise books, to be submitted to the school inspector on his visits. Judging from many conversations which the writer has had with schoolmasters, the temperance instruction is usually given, not as a special lesson, but as occasion offers, in connection with other subjects. There is, however, no doubt that genuine temperance teaching is very generally given. Wall pictures and diagrams, as well as literature on the subject, are distributed freely to all the schools, and the teachers receive special information on it in lectures by experts, mostly medical men. In addition to this instruction, temperance societies for scholars are affiliated to most of the schools, and federated in a national union. The number of members in these School Temperance Societies is very large (120,098 on December 31, 1905); but, as a rule, membership implies nothing more than formal adhesion to the Society. In most cases the members seldom or never meet, and do no temperance work. Some educationalists in Belgium feel that it is unwise to try to secure temperance by pledging children; but whatever the value of this particular step may be, there is evidence that the temperance teaching in the schools is already having some effect on the drinking habits of the people.

Although, as we have seen, the work remaining to be done by the temperance societies and the Government in checking the consumption of alcohol is enormous, progress is really being made, for although the condition of affairs to-day is bad, it has been worse. Reference to the table on p. 600 will show that whereas from 1890 to 1902 the *per capita* consumption of spirits varied from 1·84 to 2·16

gallons, it dropped in 1903 to 1·16 gallons, and has never risen above 1·28 gallons since.¹ The apparent cause of this sharp drop in 1903 was a great increase in excise duties, which were raised in that year by 50 per cent (from 3s. 7d. per gallon to 5s. 5d.).² The retailers, to meet the increased cost of spirits, lessened the size of the half-penny glass, and often weakened the strength of the spirits as well. It should be noted that clandestine spirit distilleries are constantly being discovered—a fact which indicates a considerable illicit consumption of spirits that does not appear in the official statistics.

With a view to gaining information as to whether the amount of drunkenness is markedly less than it was, an enquiry was addressed to the Trade Union secretaries in Ghent, asking them to give their opinions on the question so far as it concerned their unions. The almost universal opinion was found to be that drunkenness among their members was decreasing, and that a public opinion which condemned it was growing. A few typical replies received from the Trade Union secretaries may prove of interest:—One Socialist labour leader says: “Only a few years ago there was hardly a general meeting of our Union whose order was not disturbed by intoxicated members. Even at the meetings of the Committee, members were often present who were more or less drunk. Now that does not occur.” The secretary of another important Union says: “During the last ten years the hours lost through drink have diminished by 80 per cent.” Yet another Union official draws attention to the fact that the custom of clubbing together on Mondays for the purchase and consumption of gin has completely disappeared from the

¹ These figures refer to spirits of 50° by the Gay Lussac alcoholometer, which is the one officially used in Belgium. To reduce the Belgian figures to their equivalent in British proof spirit, they must be multiplied by $\frac{3}{4}$ ths.

² It is important to note that a previous substantial increase in the duty, namely, from 2s. 4d. to 3s. 7d. per gallon, which took place in 1898, was not followed by any diminution in the consumption of alcohol. It is intelligible that a further increase upon an already raised duty would have a sharper effect upon consumption than an earlier increase; but it is curious that the increase of 56 per cent in duty which took place in 1898 should have had no apparent effect upon consumption.

workshops of his trade. Generally speaking, the drinking habits seem to be rooted most firmly among the less skilled classes of workers; but even here, drunkenness, which a few years ago was considered a matter for boasting, is now looked on rather as a matter for shame.

The club difficulty, which has proved such a stumbling-block to temperance reform in England, does not, of course, exist in a country where any respectable person can obtain a licence, and where, therefore, the breweries have no interest in promoting drinking clubs.

There are, unfortunately, no trustworthy statistics of the total expenditure on alcoholic drink, but a calculation may be based on the average selling price of spirits, beer, and wine respectively. If this is done, we get a figure of twenty-three million pounds as the average annual drink bill for the country in the five years 1903 to 1907, which is equal to about £3 : 4 : 0 per head of the population.¹ Accepting this figure as approximately correct, it will be noted that the *per capita* expenditure on drink is almost as high as in the United Kingdom, where it amounts to about £3 : 15 : 9,² and this notwithstanding the fact that drink is much cheaper in Belgium. When it is remembered that in England, where wages are comparatively high, the expenditure of the working classes upon drink absorbs about one-sixth of their income, it is clear that in Belgium, where

¹ This sum is made up as follows :—

	Average Selling Price. Per Gallon (50°).	National Drink Bill.	Per Head of Popu- lation.
	s. d.	£	s. d.
Spirits	15 3	6,688,534	18 5
Wine	5 5	2,080,640	5 8
Beer	0 10	14,493,230	40 0
Total	21 6	23,262,404	64 1

See further Appendix, p. 602.

² This figure, referring to the year 1907, has been kindly communicated to the writer by Mr. Arthur Sherwell, M.P. (joint author of *The Temperance Problem*).

the wages are much lower, the proportion of working-class income spent on drink must considerably exceed one-sixth; in other words, for more than two months out of every twelve the Belgian workers toil simply to pay their drink bill.¹

It is evident, therefore, that the drink question is one which plays a very important part in the present social condition of the people. This is a fact which the Socialists and Trade Unionists are beginning clearly to realise, and in practically all the meeting-places which they control, such as the *Vooruit* in Ghent, and the *Maison du Peuple* in Brussels, the only alcoholic beverages served in the cafés are light beer and wine; while entertainments which they organise are a valuable counter-attraction to the public house. There is urgent need for the development of public opinion in favour of temperance and for legislation which will check excessive drinking.² Unfortunately, the electoral power of the brewers and of the enormous number of publicans is so great as to stand seriously in the way of effective legislative reforms; and, until these are enacted, excessive expenditure upon alcoholic drinks is likely to remain an important factor in the poverty of the Belgian people.

¹ It is assumed that the working classes are responsible for the same proportion of the total drink expenditure in Belgium and in England.

² For some account of the temperance legislation already enacted by the Belgian Government, see Appendix, p. 603. Statistics regarding arrests for drunkenness are not given in this chapter. They are of no value unless accompanied by full information regarding the practice of the police at different times and in different places. As a matter of fact, the police in Belgium have been very lax in carrying out the law of August 1887, which enacts that all persons causing disorder or a scandal, or danger to themselves or others, through drunkenness in a public place, shall be arrested. This laxity has led to several official circulars being addressed to the police authorities urging greater vigilance.

CHAPTER XXVII

BETTING AND GAMBLING

CLOSELY associated with the evil of intemperance is that of betting and gambling. Fortunately for the country, this is not so widespread and serious in Belgium as in England; but it is sufficiently so to merit discussion here.

The interest in athletics and sports of all kinds is growing rapidly. Rowing, horse-racing, football, archery, bicycling, and many other pastimes are claiming a constantly increasing number of devotees, and in connection with each there are many opportunities for betting of which the public is not slow to take advantage. The evil has become sufficiently serious to induce the authorities in the railway, postal, and telegraph departments to make a rule that any one found betting shall be dismissed, even if the practice has not led to any dishonesty. This rule was made as the result of a number of cases of dishonesty among betting men in these departments.

Horse-racing is very general, the races being of two kinds—first the fashionable ones, attended by the upper and middle classes, and second a number of small races, patronised by coachmen, servants, clerks, shop-assistants, and working men. Among the well-to-do there is a considerable amount of betting on horses, but as book-making is illegal except on the racecourse (although carried on clandestinely to a considerable extent), it may be said that horse-racing does not, as yet, greatly interest the working classes. The newspapers devote an increasing amount of space to sport, but betting news fills only a small

part of it. Most of the papers publish starting prices, and many of them "sporting prophecies," but they occupy a much less important place than in Britain.

Games of hazard are eagerly indulged in by a certain section of Belgians, and, until suppressed in 1903, there were many elegant and luxurious gambling casinos in different parts of the country. Since their suppression a number of clandestine gambling clubs have sprung up, where high stakes are played for. Fortunately, however, the craze for gaming which finds expression in this way is limited to a comparatively small section of society. Where cards are played for money among the lower-middle and working classes, the stakes are usually low. In cafés, as a rule, men play for the price of the drinks and nothing more.

Mention may here be made of the Premium Bonds largely issued by Belgian towns. These bear interest somewhat lower than the ordinary rate, but carry with them the chance of winning a substantial prize. Periodically there are drawings, and the holder of the bond which bears the lucky number wins the prize. Bonds of this kind are very popular, but of course their issue tends to develop and popularise the gambling spirit among the people.

Cock-crowing contests and cock-fighting are still more or less popular in some parts of the country, although the latter is illegal; but undoubtedly the chief sport of the working people in Belgium is pigeon-flying, which has developed enormously in recent years. Whereas in 1898 the Belgian railways carried two and a half million pigeons, by 1907 the number had risen to eight and a half millions, all of which were being taken to places at a distance from their homes, in connection with pigeon-flying races. In the decade ending 1907, the Belgian railways carried no less than forty-one and a half million pigeons. Sometimes the distance to which they are taken is considerable, races from Bordeaux, Madrid, Ajaccio, and Barcelona being not uncommon. Some years ago 4000 pigeons took part in a race from Rome to Ghent, but so many birds were lost

that it will probably be some time before the experiment is repeated.

It is estimated that about 100,000 men keep racing pigeons. They are organised in about 4000 societies distributed all over the country. Thus in Brussels there are 175 societies, with 2500 members; in Ghent 35 societies, with 1700 members; and in Antwerp there are 11 federations of societies, the two principal ones having respectively 116 and 104 societies connected with them.

As a rule, a pigeon-flyer keeps from twenty to twenty-five birds, which cost him about $2\frac{1}{2}$ d. a day for food. Thus the sport itself is not expensive; but, unfortunately, betting is almost always associated with it, and although this evil has not developed to the alarming extent found in England in connection with horse-racing, it keeps pace with the interest in the sport, which is increasing by leaps and bounds. The writer has himself spoken with a pigeon-flyer who earned 28s. a week, and regularly staked £2 a week on pigeons; and instances could be cited where men have actually sold their beds in order to find money with which to back a favourite bird.

That the craze for pigeon-flying so obsesses the minds of some of its devotees as to leave neither time nor inclination for the consideration of more serious matters, is evident, if we can accept as even partially true the following statement which appeared in the socialistic journal *Vooruit*:—

“I lately talked,” says the writer, “about our propaganda to comrades from Lierre, Alost, Willebroeck, Grammont, and they all replied, in a discouraged tone, ‘Propaganda during the summer? Impossible! The pigeons come first!’”

“Comrade C. gave me a typical description. ‘In our place,’ he said, ‘almost every worker has a pigeon-house. The interest of all of them is taken up with the pigeons—it is a real craze, a veritable plague! From early morning, before going to work, they are occupied with their pigeons; during the day they talk of nothing else, and after work the conversation is still of races, breeders, trainers, and so on.’”

“The meetings of propagandist clubs and of friendly societies are suspended or curtailed, while those of the pigeon-flying societies are most successful, and last until late at night. Every Sunday there are

at least ten, fifteen, or twenty races, small and large, with small prizes and large ones, and not a day in the week passes without some local races or training competitions, which again give rise to more important races.

“Most of the amateurs have no longer time to read an ordinary newspaper or a pamphlet, but sporting papers of all kinds are devoured, are passed from hand to hand, and discussed with an indescribable heat of enthusiasm. Wife and child don't count; family life disappears; the social gatherings of the party are no longer attended; the pigeon alone reigns as absolute master!”

There is no doubt that this picture is overdrawn, but the feeling of indignation in the mind of the writer is indicative of the fact that the craze for pigeon-flying is a factor tending to dull the social consciousness of the Belgian people, though, in comparison with others, it is perhaps not an important one. The present writer can speak from personal observation of the absorbing interest taken in pigeon-flying by many working men in Belgium.

The racing season lasts from May to September. During this period the large societies, such as the “Derby National” of Brussels, organise races every week, or even oftener. The smaller societies organise them less frequently, but if there is no race in connection with a pigeon-flyer's local society, he may enter his birds for any other race which he chooses. The number of pigeons entered usually varies from four or five hundred in the case of the small societies, to over a thousand in the large ones. At an important race from Angoulême, near Bordeaux, in 1908, no less than 7800 pigeons were entered, the stakes amounting to £3200. This, of course, was exceptional, but some idea of the money staked week by week in Belgium may be gained from the fact that in Ghent, throughout the season, it amounts to about £240 a week.

Every detail in connection with the sport is most elaborately organised. When only a few days old the birds are entered in the official register, and a numbered aluminium ring is affixed to one of their legs. Early in their career their course of training begins. As the owners are almost always working men with but little leisure at their disposal,

this is often undertaken by professionals, who perform the work at fixed charges.

The races are very carefully arranged. In the case of the important ones, where there are many entries, a special train may be engaged to convey the birds to the starting-point, one or more attendants travelling with them to minister to their wants *en route*. When racing, each bird has, in addition to the aluminium ring which it always wears, a special ring attached to its leg, bearing a number known only to the starters. Directly the birds are liberated, a telegram is sent to the headquarters of the society, usually a café, stating the exact moment of liberation and giving particulars with regard to the state of the weather and the direction of the wind. As soon as the time arrives when the winning birds are expected home, all is excitement, and a stranger walking through the district wonders why all the men are staring up into space! The owners of the birds are perched up near their pigeon-cotes to lure them within as soon as they are sighted. Directly one arrives, the owner removes the special racing ring from its leg, puts it into a small box which he has ready, and drops this box into an apparatus called a *constateur*. This is an elaborate mechanical invention which indicates, by means of clock-work, the exact time at which the box containing the bird's numbered ring was dropped in. The apparatus cannot be tampered with in any way, for prior to the race it has been officially sealed at the headquarters of the society. When the ring has been dropped in, indicating that the bird has reached home, its owner takes the *constateur* to the headquarters of the society, where the time of the bird's return is noted by the officials. A good *constateur* costs about £6; and pigeon-flyers who do not possess one arrange with a friend to convey the little box containing the ring taken from the pigeon's leg as rapidly as possible to the nearest *constateur*. This explains the fact that, on the occasion of a race, one sometimes sees youths rushing through the streets as if their very lives depended upon their speed. In order that not a moment may be lost, some pigeon-flyers fix a tube from

the pigeon-cote to the street, down which the little box is shot into the hands of the runner. No one may bet except on his own pigeon, but in practice this rule is evaded, for a man who wishes to bet on a particular bird can easily get the owner to put money on it on his account.

At one time the amount of the stakes which could be placed upon a pigeon was strictly limited, but recently, by the introduction of a system of "*doublage*," the details of which need perhaps not be given here, this restriction has been almost entirely removed, so that a man may now win as much as £1000 through the success of his birds in one race. The reader need not be reminded that while high stakes may mean large winnings to those who are successful, they mean correspondingly large losses to the unsuccessful—losses which bring hardship and privation to the women and children in many a working-class family in Belgium.

On the average, a racing pigeon fully trained is worth about a couple of pounds, but the writer has heard of cases where as much as £60 has been given for a bird.

Even pigeon-flying is not without its connection with the land question. Recently a case came before the courts in which the plaintiff had been turned out of his house, it being required for some public purpose, and was allowed £90 damages on account of the reduction in the value of his pigeons, due to the fact that they had been trained to return to the old pigeon-cote, and would have to be trained again before they would return to the new one! The court found that the pigeons were originally worth £5 each, and had lost one-third of their value through the change in the position of the pigeon-cote.

CHAPTER XXVIII

HOUSING

It would be impossible, in a book covering so wide a range, to treat the question of housing with any attempt at fulness; but no picture of the standard of comfort of the Belgian people would be complete without some account of it.

This chapter will therefore be devoted to a brief description of the houses occupied by the working people, some particulars regarding the rents paid, the amount of overcrowding, the results of the successful housing legislation of 1889, and a few cognate matters. It will be shown that the rents are very low in Belgium, and the reasons for this will be discussed.

Not only is the population of Belgium denser than that of any other European country,¹ but it is growing rapidly. The increase amounted to 10·28 per cent between 1890 and 1900.² The most recent census figures show that this rate of increase is higher than that of Great Britain (9 per cent), Austria (9 per cent), and much higher than that of France (1·61 per cent). On the other hand, in Italy, Germany, Switzerland, and Holland, the population is growing more rapidly than in Belgium.³

The problem of housing a population at once so dense

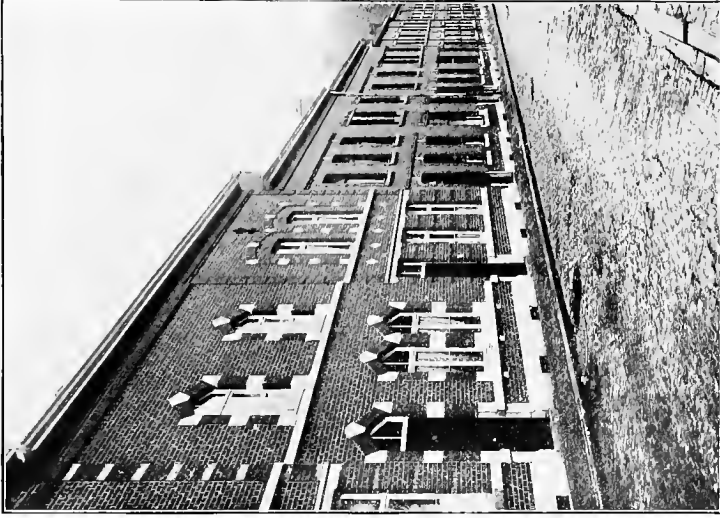
¹ See p. 513.

² The increase since 1831 has been 61 per cent, but not in equal progression.

³ Holland	13 per cent from 1889-1899.
Switzerland	13 ,, ,, 1888-1900.
Italy	14 ,, ,, 1881-1901.
Germany	14 ,, ,, 1890-1900.



SLUM HOUSES IN GHEENT.



TYPICAL MODERN STREET OF WORKMEN'S HOUSES (CLASSES I. AND II.)
By permission of the Liège "Comité de Patronage."

and increasing so fast, is not an easy one, especially in the towns, where, as in other countries, the increase is much more rapid than in rural districts.

It is the general custom in Belgium for each family to live in a separate house. The large tenement dwellings so often found in other continental countries are confined to a few towns, principally indeed to Brussels and Antwerp; but even there they by no means exclude the one-family house. The average number of persons per house is five.¹

The following pages relate only to the houses of the wage-earning classes, and for convenience of treatment those in town and country have been separated.

URBAN HOUSING CONDITIONS

For purposes of description, urban working-class houses may be divided into three classes: first, those occupied by the best-paid workmen, and by clerks and petty officials; second, those of skilled workmen, not receiving the highest wages, and also a number of unskilled workmen, members of whose families earn money; and third, the houses of the majority of unskilled workmen, and the poor generally. This class includes the slums.

Class I. Houses

According to English ideas, Belgian houses, although, as we shall see, well constructed, cannot boast, even in Class I., of much artistic merit. For purposes of economy they are usually built in rows, but as very frequently they are owned by the occupiers, each house in a row may be quite differently decorated. This gives a motley

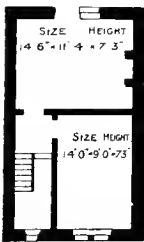
¹ In 1900 the number of houses was 1,329,504, and the population of the country was 6,693,548.

The average number of persons per house varies slightly according to the size of the towns, as follows:—

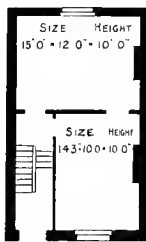
In the	32 communes of more than 20,000 inhabitants, it was	$6\frac{1}{8}$
„	195 „ 5000 to 20,000 „ „	$4\frac{3}{4}$
„	500 „ 2000 „ 5000 „ „	$4\frac{3}{4}$
„	1890 „ less than 2000 „ „	$4\frac{1}{2}$

appearance to the streets, which, though seldom beautified by tree-planting, are usually of adequate width. In the smaller towns, the paving of footpaths and the surface of the roads are often rough. Sometimes there are whole streets of houses belonging to Class I, but more generally Classes I. and II. are found in the same districts. As a rule, those in Class I. have a frontage of 16 or 18 feet and a depth of 25 or 30 feet, exclusive of out-buildings. Except in the centre of a town, it is customary to have a little garden of from 60 to 90 square yards. In country districts the gardens are much larger. Most of them are well cultivated, providing an extraordinary selection of salads and vegetables. The houses are almost invariably built right up to the street, with the gardens behind. They are high, often measuring 25 or 30 feet to the eaves; but as they are also narrow and the eaves do not overhang, the proportions are not pleasing. Usually they are built of brick and roofed with tiles or slates, according to the district. They have a parlour, a kitchen on the ground floor, opening out of a passage, and two bedrooms on the first floor. On the second floor there is either a mansard which may be quite a good room, or one or two large attics.¹ In addition, almost every house has one or two good cellars; indeed, these are obligatory in certain towns. Many of the older houses have no scullery, and even new houses are often built without one. A bathroom is never seen; even miners, who are obliged to wash all over every day, have none, although in other respects their houses may be well fitted up. The parlour is only used on state occasions. Its chief feature is a highly ornamental mantelpiece of marble or polished stone. Window-sills are also of marble. In some districts the floor is of tiles, in others of wood, covered with linoleum, or possibly a square of carpet. The method of furnishing is sufficiently indicated by the photo-

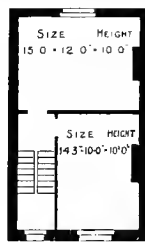
¹ A mansard is a room in the roof which is ceiled and has a dormer window. The attics are not ceiled and are lit either by a small window close to the floor or by a sky-light. Mansards are frequently used as bedrooms, but it is exceptional for any one to sleep in the attics. This applies also to Classes II. and III.



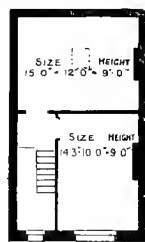
Basement.



Ground floor.



First floor.



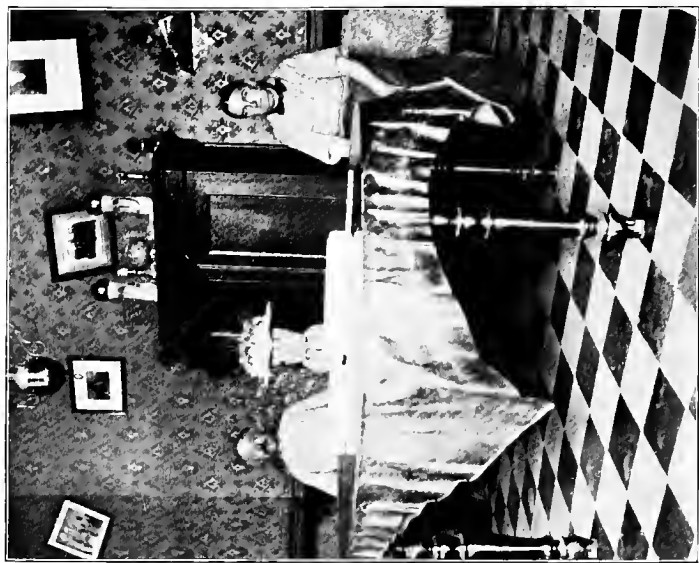
Attic.

The house to the left is a typical Class I. house built in 1904 at Herstal, near Liège. It cost £224 (land, £48; building, £176).

(By permission of the Liège "Comité de Patronage.")



PARLOUR OF MINER'S HOUSE (HAINE-ST.-PIERRE, NEAR CHARLEROI).
Typical of the best Houses in Class I.



INTERIOR OF MINER'S HOUSE (HAINE-ST.-PIERRE, NEAR CHARLEROI).
Typical of Houses in Class II.

graphs on page opposite. Behind the parlour is the kitchen, which is the real living-room of the house. It has a tiled floor, which is often sanded. In the corner is the sink, unless the house happens to have a scullery. The cooking is done on a stove, not by means of an open fire—one such as that shown in the photograph at page 450 is the usual type. Before going into the chimney, the smoke and hot gases coming from the fire pass along the horizontal portion of the stove which is used for keeping pots hot, an arrangement economising fuel. A door at the back of the kitchen opens out on a little yard with sanitary convenience and often a small lean-to shed. Behind this, unless the house is in the middle of a town, there is usually a garden. The stairs lead as a rule from the end of the passage, occasionally from the kitchen. The bedrooms, although large and well-lighted, are, according to English ideas, barely furnished. The walls are whitewashed, and the floors are neither stained nor carpeted, but small mats are placed by the bedside. The furniture is reduced to a minimum, and is very plain. From a hygienic point of view, there is no doubt that these rooms are much healthier than the over-furnished and over-curtained rooms, so often found in houses of a corresponding class in Britain. The roof space in Belgium is well utilised, and the mansards or attics provided are very useful, either for some of the children to sleep in, or for storage purposes. The cellars are extremely convenient, enabling the housewife to buy coal and potatoes in considerable quantities, thus effecting important economies. Except in some of the mining districts of Belgium, only a small proportion of the houses have a private water-supply: in most cases one tap serves for three or four households. In some districts closets are often shared by two or more households.¹ Houses of this class cost from £160 to £240, including about 140 square yards of land, costing from 3s. 6d. to 6s. 6d. per square yard. Generally speaking,

¹ In the newer houses, especially in the large towns, the water-closet system is almost universal; but there are still many urban districts where no sewage system exists; and here pail-closets are more frequently found in houses of Class I. than midden privies.

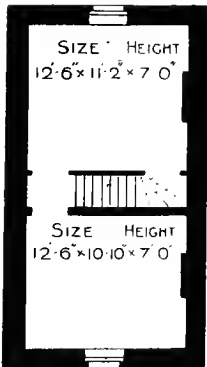
the best working men's houses in Belgium are better than in England, so far as accommodation is concerned, the rooms being loftier (about 10 feet high), larger, and lighter; but they are inferior in sanitation. This is partly owing to the fact that so few of them are in large towns, and so many in districts where the arrangements for water supply and sewage disposal are somewhat primitive.

Class II.

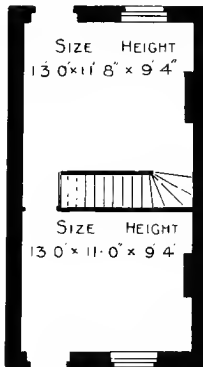
The houses in this class can be very soon described, for they are little more than imitations of Class I. on a somewhat smaller scale—less well-finished and less expensively furnished. There is seldom a parlour, and where there is, it is often entered directly from the front door, the passage being dispensed with. The stairs to the bedrooms rise directly from the kitchen and are close-boarded, with a door at the bottom. The cellar accommodation is less than in Class I. houses, only half the house being cellared instead of the whole. The water-supply and closet accommodation are less ample than in Class I., and often, in the large towns, shared with a considerable number of other houses. Yet the houses are, as a rule, well and substantially built, and the rooms, although plainly fitted and furnished, are lofty and well-lit. Speaking with the same qualifications as in the case of Class I., they compare favourably with those of the same class in Britain.

Class III.

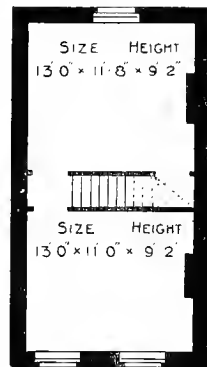
The houses in this class are occupied by unskilled workmen, and the poor generally. They cannot be described under one head, as they vary greatly. The best of them are inhabited by unskilled workmen in regular employment, and are built of brick, sometimes whitewashed or colour-washed, and are fairly well built. We enter from the street directly into the kitchen living-room, opening into a small yard with sanitary convenience, behind which is a kitchen-garden, smaller than those of Classes I. and II. From the



CELLAR.



GROUND FLOOR.



FIRST FLOOR.

HOUSE AT JUILLE (NEAR LIÈGE), BUILT IN 1900.

Cost of house, £184 (including land, £51).

Rent, 12s. a month.

By permission of the Liège "Comité de Patronage."



INTERIOR OF CLASS III. HOUSE.



TYPICAL WORKMEN'S HOUSES IN GHENT (CLASS III.).



HOUSE (NEAR LIÈGE) TYPICAL OF THE WORST SLUMS.*

It is situated in a passage, and there are two rooms--kitchen and mansard--and eight inmates, the muted daily income being 7s. 3d. The rent is 7s. 3d. per month. Two insanitary earth closets adjoin the house on the right.



THE UPPER ROOM OF THE ABOVE HOUSE.*

There is no bed. Father, mother, three daughters (24, 14, 10), and three sons (20, 7, 2½) sleep here on dirty rags. Note on the left the face of a girl who is ill.

* By permission of the Liège "Comité de Patronage."



TYPICAL SLUM DWELLINGS.*

Old houses near Liège, insanitary and out of repair. Each consists of two rooms. In one house (rent 10s. 5d. monthly) lives a family of seven persons, whose total income is 5s. a day. In the other (rent 8s. monthly) lives a family of five, whose income is also 5s. a day.



LIVING-ROOM IN ONE OF THE ABOVE HOUSES.*

In a repulsive state of dirt and evil odours. On the table, to the left, are dirty rags and old linen.

* By permission of the Liège "Comité de Patronage."

kitchen a flight of open stairs leads to the bedrooms, two, or sometimes one and an attic. All the rooms are low and rather small. Most of the houses have a cellar and a separate rain-water cistern, but few have a private water-supply or closet. Sometimes one water-tap or pump serves for 50, 100, and even 200 houses, and one closet for as many as ten families. The pail system is probably the most frequently found in houses of this class, even in the large towns, where the lowest class of houses are usually the oldest. Midden privies, however, are still extensively used in the smaller towns, especially in Flanders. The furnishing is not unlike that of Class III. houses in Britain.¹ There are, unless very cheap ornaments come under this heading, few luxuries. The bedrooms contain a plain bed and one chair, but no chest of drawers or cupboard, the clothing being hung on racks. All the bedrooms, and often the kitchen-sitting-room, are whitewashed. For this type of house see photographs on pages opposite.

Class III. houses are usually built in narrow streets or courts, without admixture of better dwellings. But as most of the Belgian towns are small, in comparison with the British, there is a pleasing absence of those great and dreary areas with nothing but the poorest houses which are to be found in Britain. Moreover, gardens, which are numerous even in this class, reduce the number of houses per acre, and although they are almost hidden behind the buildings, an occasional glimpse of them greatly relieves the monotony. Besides, the Belgian towns, on the whole, are well supplied with open spaces, of which all grades of the population take advantage.

From dwellings such as these the houses in Class III. gradually sink till we get the real "slum dwelling." Professor Mahaim has well said that "nothing is so international as the slum," and we need not pause to describe those of Belgium. Situated in narrow streets or courts, with the usual dingy and sordid surroundings, they present all the characteristics of slum dwellings in Britain.

¹ For more detailed description see pages 347 and 349.

Before passing to other matters, it must be added that the houses in Class III. differ in important respects from the corresponding class in Britain, where a greater proportion of the industrial population lives in towns. In Belgium, especially in the south, there are large suburban tracts in which industrial workmen live a life halfway between that of town and country. Here many of the houses are old, small, and insanitary, but they are better than the squalid slums in a densely populated town district. Of course there are slums in all the towns. Some are as bad, possibly worse, than anything to be found in Britain, but it is doubtful whether they represent as large a proportion of Class III. Probably this Class consists chiefly of small houses, inhabited by persons who are poor, but cleanly and respectable.

As regards the proportion of houses falling into Classes I., II., and III., respectively, it would be impossible to speak with certainty, without making an investigation upon a colossal scale, beyond the scope of private enterprise. But the reader may reasonably demand that the writer and his helpers, after spending years in examining social questions in Belgium, with the housing problem constantly in their minds, should seek to give some estimate of the facts. Without pretending that the figures represent anything more than the general impression left upon the mind after careful investigation, the writer would suggest that the proportion, roughly speaking, is as follows:—

Class I.	.	.	.	.	10 to 15 per cent.
„ II.	.	.	.	.	30 to 35 „ „
„ III.	.	.	.	.	50 to 60 „ „

We must now turn to other aspects of the housing question in Belgium, and consider what rents are paid for the houses, and under what conditions people are living in them, whether they are overcrowded, whether there is much sex promiscuity, whether the rent bears a high or low relation to the income, and similar enquiries.

There are no general statistics in Belgium with regard to matters of this kind, although some of the *Comités*

de Patronage,¹ notably that of Liège, have collected most valuable information relative to restricted areas. Unfortunately, the statistical methods they have employed, and their methods of classifying results, differ so greatly from one another that their reports cannot be used for the purpose of a general statement. The writer has, therefore, been obliged to prepare statistics of his own, and this could only be done on a limited scale. The method adopted was to select typical districts, and to employ local investigators to fill up question forms. Altogether about 4000 forms were filled up, covering seventy-four different towns or districts.² Similarity of treatment was ensured through each local investigator's being in close touch with the writer's secretary, who resided in Belgium, and himself selected agents and instructed them in their work, particularly explaining to them the threefold classification described above. The investigators filled in the forms in the houses after ascertaining the facts.

For the sake of clearness, the reports received from the investigators have been grouped into certain districts as follows :—

(1) *Brussels* and suburbs.

(2) *Antwerp* and suburbs.

(3) *Ghent*.

(4) *The Borinage*, in the south of the province of Hainaut. Its chief industry is coal-mining; it has also a few engineering and iron works.

(5) *The district round Charleroi*: the "black country" of Belgium. Here, grouped round rich coal mines, are to be found all kinds of iron, steel, and engineering works, blast furnaces, foundries, and glass works.

(6) *The Centre*, which lies between the towns of Charleroi and Mons. This also is a mining district. Engineering and other industries are more developed than in the Borinage, but less than around Charleroi.

(7) *The district round Liège*. This, next to the basin

¹ These are officially appointed Housing Committees, see page 457.

² For copy of one of these forms see Appendix, page 605.

of Charleroi, is the greatest industrial centre of Belgium ; but here, as in the regions referred to above, the industries are distributed over a number of industrial villages, scarcely separated one from another. Coal and iron mines, the manufacture of firearms and engines, along with blast furnaces and zinc works, are among the most important.

8. A few *industrial towns* in the *Walloon district* of Belgium, namely, Namur, Arlon, Ath, and Tournai.

9. A group of the *smaller Flemish towns*, namely, St. Nicolas, Wetteren, Grammont, Renaix, Lokeren, Roulers, Menin, Bruges, Courtrai, Tirlemont, Malines, Turnhout, and Lierre.

The writer fully recognises that any statement as to general housing conditions based upon so limited an investigation cannot pretend to scientific accuracy ; but from his personal knowledge of housing conditions in the various districts, based upon a large number of visits paid to houses of all kinds, he feels that the information gained by the statistical enquiry is of value, and gives a rough but useful indication of the actual facts.¹

Rents

The actual rents paid in the different districts are given in the following table ; the industrial districts (4-7) are classed together :—

¹ The reports received from the investigators were not always complete, thus the number of houses for which information was obtained under different heads, such as rent, overcrowding, etc., is not always the same. In the case of rent, moreover, many of the houses were owned by the occupiers, and no rent, in the ordinary sense of the term, was paid.

RENTS

No. of Rooms.	Class.	Brussels and Antwerp with Suburbs.	Ghent.	Liège and Hainaut Industrial Districts. (a)	Walloon Towns. (b)	Flemish Towns. (c)	Four Communes (Outskirts of Liège). (d)	Seraing. (e)
One room.	I. No. of houses	182 1/4	51 1/4
	Rent . . .	...	...	...	...	...
	II. No. of houses	8	...	...	3	...
	Rent . . .	1/11	...	...	2/0½	...
	III. No. of houses	26	...	34	12	62		
	Rent . . .	2/1	...	1/7	1/6	1/3		
Two rooms.	I. No. of houses	859 2/3½	746 1/10
	Rent . . .	...	...	...	...	...
	II. No. of houses	75	21	70	32	43		
	Rent . . .	3/5	1/10	2/6½	2/2½	1/8½		
	III. No. of houses	84	35	116	63	163		
	Rent . . .	2/11	1/8½	1/8	2/0½	1/5		
Three rooms.	I. No. of houses	25	7	18	5	23	486 2/6½	340 2/1½
	Rent . . .	4/0½	2/4½	2/11	2/11	2/6½ ^(f)		
	II. No. of houses	153	49	121	39	124		
	Rent . . .	4/0½	2/3½	2/7	2/10	1/11		
	III. No. of houses	64	56	177	146	155		
	Rent . . .	3/6	2/0½	2/5½	1/7	1/7		
Four rooms.	I. No. of houses	27	3	157	21	100	619 3/	205 2/7
	Rent . . .	4/10	2/9	3/5	3/2	2/6½		
	II. No. of houses	41	4	157	2	111		
	Rent . . .	4/1½	2/6½	2/8	3/2	2/0½		
	III. No. of houses	19	2	59	39	44		
	Rent . . .	3/8½	3/2	2/10	1/10	1/10		
Five rooms.	I. No. of houses	20	6	44 ^(g)	8	38	117 3/10½	18 2/11
	Rent . . .	6/9	4/1½	3/5	3/8½	2/7		
	II. No. of houses	4	5	28	3	7		
	Rent . . .	5/4½	3/2	3/	4/2½	2/1½		
	III. No. of houses	...	...	...	...	...
	Rent . . .	...	...	...	...	...
More than five rooms.	I. No. of houses	6	...	11 ^(g)	2	5	45 5/6½	2 4/0½
	Rent . . .	9/7	...	4/4	4/1½	3/2		
	II. No. of houses	6	...	9	3	1		
	Rent . . .	6/1	...	3/3	4/5	2/9		
	III. No. of houses	...	...	...	...	...
	Rent . . .	...	...	...	...	...

(^a) A number of typical communes in the industrial regions of Charleroi, the Borinage, and Liège, not including larger communes or towns except for a few houses in Charleroi and Liège.

In the city of Liège a housing investigation was made in 1897 by the *Comité de Patronage*, which showed that the following rents were paid :—

Houses of one room, average for 828 houses,	1s. 7d. per week.
„ two rooms, „ 610 „	2s. 6½d. „
„ more rooms „ 246 „	4s. 1d. „

(^b) Ath, Namur, Arlon, and Tournai.

(^c) Courtrai, Roulers, Renaix, Alost, Malines, Lierre, Turnhout, Tirlemont, Grammont, Menin, Bruges, St. Nicolas, Wetteren, and Lokeren.

(^d) The information in this column was collected by the *Comité de Patronage* between 1901 and 1904. It refers to four communes—Angleur, Grivegnée, Bressoux, and Jupille—all on the outskirts of Liège. It is owing to the excellent information already collected for these communes that the writer has not included them in his own investigation, but naturally it is not possible to classify it entirely according to the same plan.

(^e) Seraing is near Liège. The information was collected by the *Comité de Patronage* in 1905.

(^f) The actual rent is likely to be somewhat lower than is here stated, for it so happens that the twenty-three houses to which the average figure in the table refers, include an undue proportion from towns where rents are comparatively high.

(^g) The rents for the larger houses in these districts are likely to be slightly higher and rising more proportionally to the number of rooms than the average here recorded, because some of the investigators in the mining districts have included in the returns information about houses belonging to mining companies and let by them to employés on exceptional terms.

The low rents cannot fail to strike the reader. If the districts are classed together, it may be said that, with the exception of Brussels and Antwerp, a three-roomed house of the first class may be had for about 2s. 4½d. a week in the Flemish, and 2s. 11d. in the Walloon towns, while a four-roomed house costs about 2s. 7d. in the Flemish, and 3s. 4d. in the Walloon districts. Houses in Classes II. and III. are still cheaper. It must be remembered, in considering the Belgian rents, that the majority of the houses have both an attic and a cellar, neither of which are included in the number of rooms, so that a four-roomed house in Belgium represents considerably more accommodation than a four-

roomed house in Britain, where as a rule there is neither attic nor cellar. Moreover, the majority of the houses investigated have gardens, the rent of which is included in that of the house. Another point must be borne in mind, namely, that except in the case of a few of the largest, no local rates or other taxes are levied on workmen's houses in Belgium. The land tax is always paid by the landlord.

We may now consider what relation the rents paid bear to the incomes of the tenants. With a view to obtaining information on this point, the investigators made enquiries into the occupations of all wage-earners in the houses investigated, and also into the wages earned. Naturally it was more difficult to get information about wages than about rents, and frequently it was necessary to resort to indirect methods to obtain it. Doubtful replies have been eliminated in making up the statistics, and thus information regarding only 1522 households is here dealt with. It was very often possible accurately to check the information received, especially in the industrial districts, where the standard wages of men engaged in the principal occupations, such as iron-works, mining, etc., are generally known.

As the number of households for which trustworthy information was obtained was comparatively small, and as high rents and high wages generally go together, the relation of rent to income is not given for the districts separately, but for the whole of the houses investigated. The following table summarises the result of the enquiry. For purposes of comparison, the writer has inserted a column in the table showing the percentage of income absorbed by the rent in York in 1899, based upon his own investigations:—

[TABLE

Average Weekly Income.	No. of Households.	Percentage of Income of Working Classes paid in Rent in Belgium and in York.	
		Belgium.	York (1899). ^a
Under 16s.	120	14·22	29
16s. to under 18s.	107	13 $\frac{3}{4}$	18
18s. „ 20s.	154	12 $\frac{3}{4}$	17
20s. „ 30s.	651	10 $\frac{1}{2}$	16
30s. „ 40s.	255	9	14
40s. „ 50s.	131	7 $\frac{1}{2}$	13
50s. „ 60s.	55	7	12
60s. and above	49	5	9

^(a) The figures given for York refer to rent *including rates*. They are therefore comparable with the Belgian figures, for, as pointed out on p. 439, Belgian working men pay practically no taxes on their houses.

As was to be expected, the proportion of the income absorbed by rent decreases as the income increases. In no single instance is it nearly so high as in York. It may safely be said that rent in Belgium absorbs a much smaller proportion of the total income than is the case in Britain, and this although the wages are so exceedingly low.¹

In view of the importance of the housing problem, and of the great efforts put forward at the present time by British reformers to provide good houses at low rents, the writer felt that it would be worth while to enquire into the exact causes of the low rents in Belgium. Were they primarily due to cheapness of land, or of construction, or to both, and how did the quality of the houses rented compare with that of British houses?

In order to obtain accurate information, the writer sent out to Belgium an English Clerk of Works, who had had special experience in the erection of cottage property. He

¹ Professor Mahaim of Liège, in a communication addressed to the writer, says: "If I *must* give a figure, I should say that in Belgium rent absorbs on the average about 10 or 12 per cent of the workman's income. Of course I am speaking here only of the average figure. There are many cases where rent absorbs a much larger proportion, just as there are others where it absorbs less." This view seems to be borne out by the table given above.

was directed to inspect typical houses in Brussels, Alost, Roulers, Waremmé, Wandré, and Jupille.¹ In all these places he inspected the houses carefully, and obtained exact details of the cost of construction, along with all information and plans necessary to prepare an accurate estimate of what it would cost to build similar houses in York. In the case of fittings which were peculiar to Belgium, and could not readily be obtained in England, he was directed to substitute in his estimate English stock fittings of approximately equal value. Eleven houses in all were examined, and estimates prepared of the cost of building similar houses in York.² The results of the enquiry were as follows:—

BRUSSELS (*Suburbs*)

- (1) Block of seven houses in wide street of first-class houses. The houses vary somewhat in design and size, but each has:—
 Ground floor—Passage, two rooms, and scullery.
 First floor—Two bedrooms.
 Second floor—Attic and mansard.
 Each house has a cellar and a basement kitchen, w.c., and water laid on in scullery. Good drainage. No gardens.
 Average height to eaves, 26½ feet.
 Average cost in Belgium (per house), £252 : 17s.
 Average cost in England (per house), £346 : 9s., or 37 per cent in excess of Belgian cost.
- (2) A good single house, in a row of others, in typical working-class district.
 Ground floor—Parlour, living-room, scullery, and passage.
 First floor—Two bedrooms.
 No attic.
 The house has three cellars, good drainage, w.c., and water laid on in scullery. Height to eaves, 18 feet 8 inches.

¹ In order to save time, the Clerk of Works did not actually visit Waremmé, Wandré, and Jupille, but he visited houses at the Liège Housing Exhibition which were exact duplicates of houses which had actually been built in these three towns. The prices given for cost of construction in Belgium refer, however, to the prices *which the houses actually cost in the towns themselves*, built under ordinary circumstances—not to the cost of the duplicate houses at Liège.

² In the case of three of the houses, full quantities were taken off from the plans and priced. The information thus gained made it possible to estimate the cost of the other houses by cubing.

Cost in Belgium, £275.

Cost in England, £382 : 15s. or 39 per cent in excess of Belgian cost.

ALOST (an industrial town in East Flanders, with a population of 29,000)

- (1) Ground floor—Passage, dining-room, kitchen-scullery.
 First floor—Two bedrooms.
 Second floor—Two mansards.
 This house is without a cellar, and without drainage. Height to the eaves, 27½ feet.
 Cost in Belgium, £260.
 Cost in England, £556, or 113 per cent in excess of Belgian cost.
- (2) Ground floor—Shop, living-room and kitchen-scullery.
 First floor—Three bedrooms.
 Second floor—Two mansards.
 The stairs lead direct from the shop into one of the bedrooms.
 No drainage, no cellar. Height to the eaves, 26½ feet.
 Cost in Belgium, £160.
 Cost in England, £330 : 8s., or 106 per cent in excess of Belgian cost.
- (3) Ground floor—Parlour, living-room, scullery, and passage.
 First floor—Two bedrooms.
 Second floor—Two mansards.
 Staircase direct from living-room into one of the bedrooms. No cellar, no drainage. Height to the eaves, 27¾ feet.
 Cost in Belgium, £180.
 Cost in England, £338, or 88 per cent in excess of Belgian cost.

ROULERS (an industrial town in West Flanders with a population of 23,000)

- (1) Detached house on the outskirts, almost in open country.
 Ground floor—Parlour, living-room, scullery, and passage.
 First floor—Two bedrooms.
 Second floor—Attic.
 Pump supply of water in scullery, cellar ; large stable for goats.
 The house has a small yard and a garden. Height to the eaves, 19 feet 8 inches.
 Cost in Belgium, £140.
 Cost in England, £251 : 8s., or 80 per cent in excess of Belgian cost.
- (2) A detached country cottage, three miles outside the town. The rooms are very small.
 Ground floor—Living-room, scullery, and passage.
 Above the low living-room, two store-rooms, above the other part of the house, three bedrooms.

No attic, but large cockloft. No cellar, no drainage.

Large coal-house, water pump. Height to the eaves, 11 feet 8 inches.

Cost in Belgium, £80.

Cost in England, £185 : 5s., or 131½ per cent in excess of Belgian cost.

- (3) One of a row of six.

Ground floor—Parlour, living-room, scullery, and passage.

First floor—Two bedrooms.

Four of the houses have an attic, two a mansard.

Pump water-supply, no drainage. Height to the eaves, 20 feet.

Cost of the six houses in Belgium, £648.

Cost of the six houses in England, £1246 : 15s., or 92 per cent in excess of Belgian cost.

JUPILLE (a busy industrial centre about three miles from Liège)

- (1) One of a row of houses, of which each has a different front elevation. Typical working-class quarter in industrial region, healthy, country-like surroundings and gardens.

Ground floor—Parlour and kitchen-scullery and passage.

First floor—Four bedrooms.

Second floor—Two mansards.

Basement, earth closet, pump water-supply at some distance, in common with some hundred houses. Height to eaves, 21 feet.

Cost in Belgium, £209.

Cost in England, £316, or 51½ per cent in excess of Belgian cost.

WANDRE (a small industrial centre about five miles from Liège)

- (1) Ground floor—Living-room and parlour. No passage.

First floor—Two bedrooms.

Second floor—One mansard.

Staircase direct from living-room to one of the bedrooms.

There are two cellars, but neither closet nor water-supply.

Height to eaves, 21 feet 8 inches.

Cost in Belgium, £132.

Cost in England, £205 : 15s., or 56 per cent in excess of Belgian cost.

WAREMME (a country town of 3660 inhabitants in the agricultural part of the province of Liège)

- (1) Ground floor—Living-room, parlour, scullery and passage.

First floor—Two bedrooms.

Second floor—Mansard and attic.

Water laid on in scullery, w.c., cellar and basement kitchen.

In the rear is a small glass-covered yard. Height to eaves, 21 feet.

Cost in Belgium, £180.

Cost in England, £392 : 18s., or 118½ per cent in excess of Belgian cost.

All the prices given for England are quoted as for standard English cottages, built of bricks and roofed with tiles, even where the actual house in Belgium is built of other local material.

Thus we see that in Brussels the cost of construction was about three-quarters, in Wandre and Jupille about two-thirds of what it is in York, and in Roulers, Alost, and Waremmé almost exactly one-half, and building prices in York compare favourably with those in larger British towns.¹

The reason for the cheapness of construction in Belgium is not far to seek. Wages, which represent about 40 per cent of the cost of cottages in York, are very much lower in Belgium than in Britain. Even in Brussels, where they are comparatively high, the wages per hour for men engaged in the building trades are less than one-half those paid in York, and in small towns like Roulers and Alost they are only about one-third. Another point is that boys are often employed in Belgium to carry bricks and mortar, which in England is done by men. Practically no restrictions are insisted upon by the Belgian Trade Unions, and in consequence, there is less splitting up of trades. Labour is also economised by using practically no scaffolding—nearly all the brickwork of buildings is built overhand, the men working from inside.

But not only are wages much lower in Belgium; materials are cheaper. Bricks cost much less than in Britain. Even

¹ In the Board of Trade Report already quoted (Cd. 3864, p. 606), particulars are given of wages paid in seventy-three English towns. These show that:—

In 25 towns	bricklayers' wages are higher than in York.
„ 51	„ masons' „ „ „
„ 50	„ carpenters' „ „ „
	and joiners' „ „ „
„ 52	„ plumbers' „ „ „
„ 31	„ plasterers' „ „ „

in towns they can be had for from 9s. 6d. to 12s. 6d. per thousand, delivered on the site, compared with 25s. 9d. in York.¹ There is no doubt that this price is explained by the low wages of the men employed in their production. Transport of materials is also cheaper. For instance, in Roulers a horse and cart can be had for about 7s. a day of twelve hours, which is little more than one-half the price paid in York (1s. an hour). Thus the chief reason why rents in Belgium are so much lower than in Britain is that building costs are so extraordinarily low.² There are, however, other factors which must not be forgotten.

First, there is reason to believe that building land is cheaper in Belgium than in England. It is certainly difficult to arrive at a definite conclusion on this point, as the price of land varies from street to street, and almost from house to house, and to make a perfect comparison it would be necessary to find building plots in the two countries where the conditions were exactly identical. But after much personal enquiry the impression remains that the cost of building land is lower in Belgium than in England, and this conclusion is borne out by the following considerations:—

1. The Belgian working classes do not crowd into great cities, but live distributed over wide semi-rural areas. This is largely due to the remarkable railway facilities—described in Chapter XXI.—which enable workmen to travel at an almost incredibly cheap rate, and by allowing urban workmen to live in the country, tend to prevent congestion of population in towns. If excessive rents were demanded in the towns, it would be exceedingly easy for the tenants to move out. The railway facilities, moreover, largely remove the objection which is rightly urged against workmen owning their own houses, namely, that it tends to tie them to a particular locality and prevents that mobility of labour which is essential to their interests. For in Belgium, if a man loses work that is close to his home, the railway rates

¹ The Belgian bricks are much smaller than the British, but notwithstanding this, the difference in price is remarkable.

² For further particulars regarding wages in the building trades see p. 561, and for cost of building materials see p. 607.

are so low that he can work at a considerable distance if he wishes to do so.

2. Building land is not often held by large and wealthy landowners, who can afford to name a high selling price and wait until people are willing to pay it. On the contrary, as has been seen, land is much subdivided, and in most districts there are plenty of small plots in the market.¹

3. There are no societies formed for the purpose of speculating in building land, as, for instance, in Germany.

In addition to all these causes for the low rents in Belgium, there are others of considerable importance:—

1. Generally speaking, the building bye-laws are less exacting in Belgium than in Britain.

2. The ease with which, owing to the Housing Act of 1889—to be described later in this chapter—a workman in Belgium can borrow money at a low rate to build his own house, combined with the comparative facility with which land for building purposes can be procured in small plots, as a rule prevents house owners from obtaining rents which represent more than a reasonable return upon capital outlay.

Overcrowding

In spite of the low rents there is no doubt that a large amount of overcrowding exists in Belgium. According to the British Census Returns, overcrowding takes place when there are more than two persons to every room in a house. Thus, a house of four rooms with eight persons would not be considered overcrowded; but if there were nine persons it would. The following table shows the percentage of persons in the households investigated in Belgium who are overcrowded according to this scale:—

¹ The writer is aware that there are exceptions to this general rule, but they are not nearly as frequent as in Britain. It may at first sight appear contradictory to state that subdivision tends to raise the price of agricultural land, while it lowers that of land in towns. But in the former case the subdivision renders possible that which would be impossible without it, viz. a small holding system which is practically equivalent to the creation of a new industry (see Chapter XII. p. 149).

	Number of Persons.	Percentage of Persons sleeping in Houses with, per Room,			
		Two Persons or less.	More than Two Persons.	More than Three Persons.	More than Four Persons.
Brussels and Suburbs—					
Class I.	236	97·03	2·97	...	...
" II.	1097	90·25	9·75	3·28	1·55
" III.	814	66·09	33·91	11·43	7·49
Antwerp and Suburbs—					
Class I.	248	92·74	7·26	3·63	3·63
" II.	332	86·14	13·86	...	...
" III.	280	38·92	61·08	...	18·93
Ghent—					
Class I.	84	94·00	6·00	...	...
" II.	355	72·00	28·00	...	...
" III.	610	50·00	50·00	9·00	3·00
Charleroi—					
Class I.	705	98·44	1·56	...	...
" II.	322	76·09	23·91	...	...
" III.	8	54·40	45·60	22·20	...
Borinage—					
Class I.	136	100·00	...	...	...
" II.	488	98·15	1·85	...	...
" III.	698	50·72	49·28	17·47	10·31
Centre—					
Class I.	587	86·89	13·11	...	...
" II.	816	97·19	2·81	...	...
" III.	1176	69·81	30·19	5·19	0·68
Liège—					
Class I.	323	97·21	2·79	...	...
" II.	311	77·49	22·51	1·61	1·61
" III.	418	33·49	66·51	42·34	20·33
Walloon Industrial Towns—					
Class I.	314	100·00	...	...	...
" II.	484	70·66	29·34	5·67	1·03
" III.	868	25·58	74·42	27·60	9·79
Flemish Industrial Towns—					
Class I.	1246	89·33	10·67	1·12	...
" II.	1510	70·13	29·87	10·80	1·46
" III.	2450	31·70	68·30	30·65	12·73

It will be noted that in Class I., with the exception of Antwerp, Ghent, the Centre, and the Flemish industrial towns, there is very little overcrowding. In Class II., however, a large proportion of the population is overcrowded, rising to

nearly 30 per cent in the small industrial towns in the Walloon and Flemish districts, and to more than 20 per cent in the Charleroi Basin and the district round Liège. Class III. is bad everywhere. Nowhere is it lower than 30 per cent, while in the industrial towns in the Walloon district it rises to three-quarters of its whole population. Excessive overcrowding, that is where there are more than four persons to every room in the house, exists in 10 per cent or more of the third-class houses in five out of the nine districts.¹

If these figures can be taken as at all representative of the general conditions in the districts to which they apply, they reveal a state of things which is very far from satisfactory, especially when it is remembered that the occupants of the houses seldom seek to modify the evil effects of overcrowding by open windows.²

Without a much larger enquiry, it would not be possible to collect trustworthy statistics of the proportion of the population living in houses of one, two, three, four, and five or more rooms, respectively; and the Belgian Census Returns give no particulars on this matter. Such information as the writer's investigation afforded indicates, however, that no

¹ For purposes of very rough comparison, the Census returns of overcrowding in certain British towns are given. The figures refer to the year 1901, and to all the houses in the towns named. Had working-class houses only been taken into account, the figures would have been higher.

Town.	Percentage of Overcrowding.	Town.	Percentage of Overcrowding.
Birmingham . . .	10·32	Leicester . . .	1·04
Bradford . . .	14·61	Liverpool . . .	7·94
Bristol . . .	3·53	London . . .	16·01
Derby . . .	1·18	Manchester . . .	6·28
Huddersfield . . .	12·88	Sheffield . . .	9·56
Leeds . . .	10·08	York . . .	5·44

² In the Appendix will be found a table showing the amount of overcrowding in the investigated houses by another method. Here only rooms actually used for sleeping are taken into account, and the table shows the number of persons per bedroom, two children under *ten* being counted as one adult.

members of Class I. live in one-roomed dwellings, though a few, especially in the large towns, have only two rooms. Generally speaking, it would seem that more than three-quarters of this class, and in some districts practically the whole of it, live in houses of at least four rooms. In Class II. it is exceptional for persons to live in one-roomed dwellings, though in many districts a considerable proportion, rising sometimes to one-third of the working-class population, are living in houses with only two rooms. Approximately, it may be said that from two-thirds to three-quarters of Class II. occupy houses of three or four rooms.¹

In Class III., with the exception of Brussels, one-roomed dwellings are rare. Speaking roughly, about three-quarters of this class live in houses having two or three rooms. Except in the mining districts of Belgium (the Borinage, Charleroi, etc.), Class III. houses of more than four rooms are exceedingly rare.

The proportion of houses owned by occupiers is much higher than in Britain. It amounts to 20·42 per cent in Class I., 4·74 per cent in Class II., and 1·24 per cent in Class III.

There is only one other fact disclosed by the enquiry which calls for comment, namely, the great amount of sex promiscuity in Belgium. In 21·72 per cent of the 3644 houses investigated, it was certain, from the information given, that persons of different sexes aged over ten years were sleeping in the same room. No doubt this considerably understates the actual extent to which sex promiscuity obtains; for the standard of even respectable people is very low in certain parts, and even where rents are small and there are enough rooms in the house, persons of different sexes will often sleep in the same room, just for the sake of warmth and companionship. Cases of this kind are not disclosed by the statistics.²

¹ It must be remembered that throughout this chapter neither cellars nor attics are counted among the number of rooms.

² In the Appendix, pp. 610-611, is a table which gives further details regarding many matters dealt with above.

Rural Housing Conditions

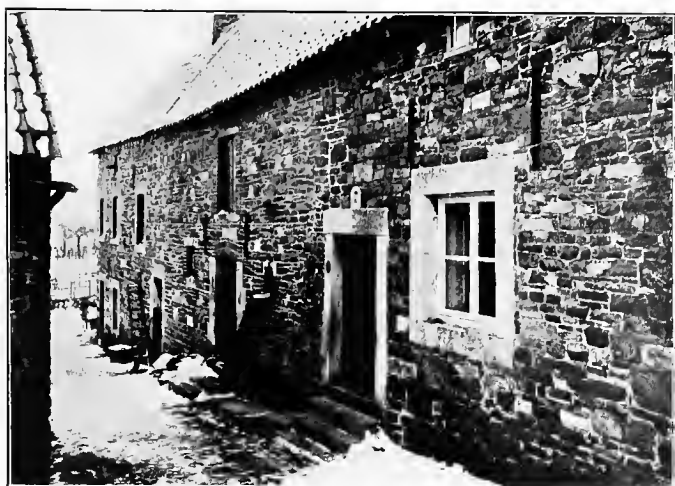
We now turn to the question of housing conditions in the country, and shall confine our attention to the houses of agricultural labourers and the smallest peasant cultivators. Many of the latter work part of their time on their own pieces of land, and the rest of it for employers in the neighbourhood.

The information with regard to country housing is primarily based upon returns kindly furnished by the twenty-seven *agronomes de l'État*, to whom enquiry forms were addressed asking for information upon specific points.¹ It will be remembered that the *agronomes de l'État* are experts appointed by the Government to foster the development of the rural districts. Each has a region allotted to him, and his personal knowledge of the agricultural conditions in his region is usually very close. This information has been supplemented by much knowledge gained personally by the writer and his investigators in their many journeys through the country.

As regards the supply of houses, there is not much to complain of. Certainly there are districts, notably those in close proximity to the large towns, where they are scarce, but there is nothing at all in the nature of a house famine, and building is proceeding rapidly in many districts. As a rule it is not difficult to obtain land for building labourers' cottages, though some *agronomes* report local difficulty. The price differs widely from district to district, and locally it varies with the proximity of the site to the centre of the village. One *agronome* speaks of the price of land required for building cottages as usually about £16 per acre more than that of land required for agricultural purposes.

The character of the houses varies greatly, both in general design and in sanitary condition. In most districts they are of one storey, with a large attic above. On the

¹ The writer acknowledges with gratitude the courtesy of the Belgian Agricultural Department in kindly addressing these enquiry forms on his behalf to the *agronomes*.

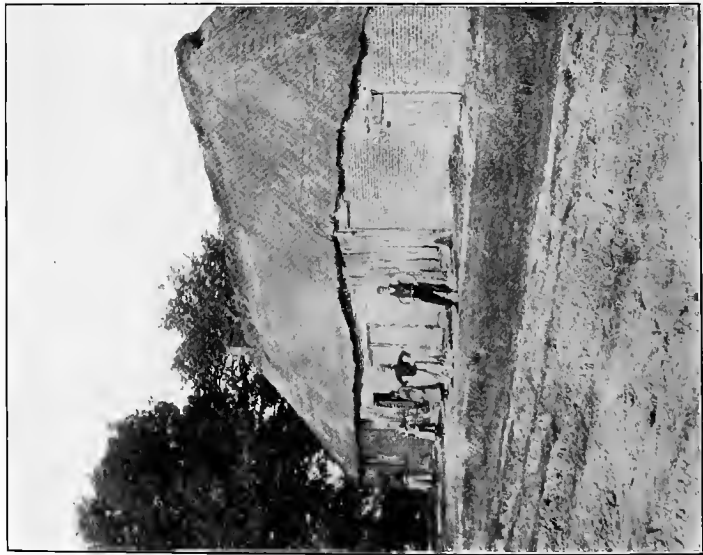


HOUSE OF AN AGRICULTURAL LABOURER, OWNED BY HIMSELF.



WIFE OF AGRICULTURAL LABOURER IN HER KITCHEN.
Note the Flemish stove.

To face page 450.



TYPICAL OLD HOUSE OF A SMALL HOLDER IN THE CAMPFIRE, BUILT IN
A FASHION NOW OUT OF DATE.



FIREPLACE IN LIVING-ROOM OF FOREGOING HOUSE.



BEDROOM IN FORGOING HOUSE.
Note the beds placed in the wall.



MODERN AGRICULTURAL LABOURERS' COTTAGES IN SART-RISBART (BRABANT).

ground floor is the living room, which sometimes has a bed in it. In addition there may be one, two, or in rare instances three other rooms. Where there is only one bedroom on the ground floor, this is used for the parents and young children, the rest of the family sleeping in the attic, which may or may not be roughly divided into two rooms. Where there are two or more bedrooms on the ground floor, one is generally used for the storage of implements and food for the goat, rabbits, and hens, or such stock as the occupant of the house may possess. It will thus be seen that the bedroom accommodation in agricultural labourers' houses is frequently inadequate. The outhouses where the pigs, goats, poultry, etc., are kept are usually attached to the main dwelling. While this is the general plan of the cottages, a few houses, especially in the south, are being built after the fashion of town dwellings, with a cellar, two stories, and an attic.

Except when they are in close proximity to stone quarries, the agricultural labourers' houses throughout Belgium are built of bricks and roofed with tiles, or sometimes slates. They are often whitewashed outside. Formerly the small dwellings in the country were made of laths filled in with clay, the roof consisting of thatch; but such houses are rapidly disappearing.

There is no doubt whatever that the majority of the older houses are insanitary; they are small, low, and frequently damp, the floors consisting either of beaten earth or of bricks laid directly on the earth, and the rooms are dark and badly ventilated. The surroundings are often insanitary also, the water-supply contaminated, and manure piled close to the windows of the living rooms. A proper sewage system is rarely found in Belgian villages, and probably the majority of houses in the country districts are not even supplied with pail closets, but with midden privies, which are the most advantageous for the purpose of collecting manure, but which—especially if not properly kept—are also the least sanitary. The conditions are improving, and modern houses are generally sanitary, but there is still

much to be desired in the condition of the labourers' dwellings.

Almost all the houses have gardens. The size varies greatly, but 600 sq. yards is a common figure. Some, on the other hand, have only 120 sq. yards, others as many as 2400 sq. yards. Rents also vary greatly according to the district, the accommodation provided, and the size of the gardens. The most frequent rent for a house with from 120 to 1200 sq. yards of land seems to be from £4 to £6 a year (1s. 6d. to 2s. 3d. a week), which includes the outbuildings. In some regions, however, rents are much lower. For instance, in eight of the twenty-seven regions, rents as low as £3 a year (1s. 2d. a week) are spoken of as common. Generally speaking, the rents are higher in the Walloon than in the Flemish provinces.

Housing Legislation

Before closing this chapter some account must be given of the Belgian housing legislation. Prior to 1889 this was chiefly confined to various Acts which materially reduced local and national taxation upon all small houses. The net result of these Acts has been that at the present time, with the exception of the largest of them, workmen's houses are subject to no taxation of any kind, except the land tax, payable by the landlord. Compared with the rates in most English towns, this tax is insignificant.¹ The immunity from taxation and rating has been of real value to working men, especially in view of the fact that there are certain factors operating, referred to in detail on page 456, which largely prevent the landlord from claiming this advantage for himself.

The legislation, however, which must principally claim our attention is the Housing Act of 1889. This is so unique in character, and so well illustrates certain principles well worthy of the study of housing reformers in other

¹ See Chapter XXII. (System of Taxation).

countries, that it merits a detailed description. The provisions of the law fall under three heads:—

1. The creation of a number of local committees to endeavour to improve housing conditions.

2. The reduction by one-half, in the case of working men, of the heavy Government duties imposed on the sale or mortgage of property.

3. Arrangement for the provision at a low rate of the capital necessary for the purchase of land and the cost of erection of workmen's houses.¹

The first and last of these conditions must be further explained.

The local committees appointed under the Act are called *Comités de patronage des maisons ouvrières et des institutions de prévoyance*. Their duties are to encourage the building of workmen's houses, either to be let or sold to the occupants, to study health conditions in working-class localities, and to stimulate thrift. They number fifty-six at the present time (1909), and are nominated partly by the central and partly by the provincial Governments. The members are unpaid, but their management expenses are met from public funds, and they must report annually to the central Government. The usefulness and activity of these committees really depend upon their *personnel*. In some cases they are doing a great deal to improve matters in their district, in others they exist in little more than name.

Coming now to the question of the provision of capital, the law empowers the National Savings Bank, whose deposits have largely been made by working people, to loan up to 7½ per cent of its reserve fund for the purpose of cottage construction.² But as it would be difficult for the central Savings Bank to enter into direct relationship with every workman who wishes to build a house, a number of local Credit Associations have sprung into existence, financed largely by philanthropists and public-spirited men, which

¹ It is possible for a workman to borrow nine-tenths of the money required to build his house, including the cost of the land.

² About £3,200,000 at the present time (1909).

act as intermediaries between the central Savings Bank and the individual workman. The great majority of these have taken the form of Limited Companies, whose function it is to lend money to working men desirous of building houses. The great bulk of the money they lend comes, as we shall see directly, from the central Savings Bank; but in order to give some security to the bank for the money lent, the shareholders in those Credit Societies which have taken the form of Limited Companies themselves subscribe a certain amount of capital. No Limited Company can be registered in Belgium unless the whole of the capital is subscribed and one-tenth paid up. The liability of the shareholders to pay up a larger amount, if necessary, acts as a very good security to the National Savings Bank for any sums which it may lend.

After the payment, then, of this legal minimum, the whole of the capital required is obtained from the National Savings Bank, which will lend to these Limited Companies capital equal to 50 per cent of their unpaid capital, plus about two-thirds of the value of any mortgages held by them. To take an example:—Suppose a Credit Society has taken the form of a Limited Company with a capital of £4000, of which one-tenth—namely, £400—has been paid up by the shareholders, leaving £3600 unpaid, the National Savings Bank will lend half the unpaid capital—£1800. Thus the Company can immediately begin operations with an available capital of £2200, in addition to which the National Savings Bank will grant capital equal to two-thirds of all the loans made by the Limited Company for which it holds mortgages. The National Savings Bank charges 3 or $3\frac{1}{4}$ per cent interest to the Limited Companies, which in their turn charge 4 per cent to the workmen, that being the maximum interest allowed by law. The difference covers the cost of management and payment of interest on shares (limited to 3 per cent). The remainder, if any, goes to a Reserve Fund.

Thus, any *bona fide* workman in Belgium can borrow nine-tenths of the money required to build a house, at a

rate of interest which cannot exceed 4 per cent. To this, of course, must be added the annual sums necessary to repay the loan. The period of repayment may be fixed by the workman, but must not exceed twenty-five years, and all loans must be repaid by the time he is sixty-five years old.

By an excellent arrangement the workman is usually induced to insure his life through the Credit Associations for a sum equal to the amount of his loan. As this life insurance is only valid until the loan is repaid, the additional cost is comparatively small. Should he die before repaying it, not only does the house become the absolute property of his heirs without further payment, but they receive in cash a sum equal to that portion of the loan which has already been paid off.¹ About five-sixths of the loans granted by the National Savings Bank have had life policies of this kind associated with them. Of course workmen desiring to insure their lives must first be examined by a doctor, and the rate of insurance varies with their age. Assuming that a man is thirty years of age, and that he obtains a first-class policy, he can, under the provisions of the 1889 law, become the absolute possessor of his house at the end of twenty-five years by payment of $7\frac{1}{2}$ per cent on the capital borrowed—viz. interest 4 per cent per annum, repayment $2\frac{1}{2}$ per cent, and life policy 1 per cent. As we have seen, he can borrow nine-tenths of the capital required for the purchase of land and the construction of his house. There are a number of associations in Belgium willing to provide suitable applicants with the whole or part of the remaining one-tenth; and in some cases local authorities put aside a fund from which grants are made to enable persons who are temporarily out of work, or handicapped by illness, to pay their periodical instalments. Practically, any working man who chooses can become the owner of his house.

¹ In 1904, a plan was introduced whereby the life insurance policy was altered to cover only that portion of the loan which remained unpaid at the time of death, and this materially reduced the cost of the life policy. This method of insurance is now generally adopted.

It is obvious that such facilities, combined with the extraordinary cheapness of the railway fares, and the great subdivision of the land which prevents any single man from "cornering" the land market in the town, tend to keep rents down to a point at which they represent no more than a reasonable rate of interest upon capital. It is almost impossible for excessive rents to be charged, except in the case of the slum population, whose earnings are too low, or whose habits of life are too irregular, to enable them to make the regular payments necessary for the purchase of their houses.

Between 1889 and 1907 the central Savings Bank lent over three million pounds for the erection of over 39,000 houses; and as the legislation on this subject becomes more widely known, more and more people take advantage of it. In addition to the 39,000 houses named above, a large number have been erected since 1889 by working men who have availed themselves of some of the privileges accorded to them by law, but not of those for the borrowing of capital. Thus between

1890 and 1895, 25,395 houses were built;
 1895 and 1900, 47,890 " " "

while the number built between

1900 and 1905 amounted to 18,659.

Housing reformers in Britain look with envy upon the facilities offered in Belgium, and are constantly asking whether it would not be possible for the British Government to adopt similar measures.¹ It is not likely that the Belgian scheme could be exactly copied in any other country; but it suggests a valuable means of providing the capital necessary for the erection of workmen's dwellings. It offers certain advantages over municipal housing schemes, and it interferes in no way with the local building enter-

¹ On December 31, 1906, the sum deposited in the British Post Office Savings Bank amounted to £156,000,000. The depositors receive 2½ per cent on this, and the Bank lends it to the Government at the same rate.

prise. It provides workmen with healthy houses at the lowest possible cost.¹

Apart from the fact that a few private individuals advance a small proportion of the money at a low rate of interest (3 per cent), there is nothing in the whole enterprise which can be described as artificial or philanthropic. It is a sound business scheme where no undue risks are run, but by means of which the difficulty of providing, at a low rate of interest, almost the whole of the capital which a workman requires for the erection of his house is overcome.

With the law of 1889 we may conclude our consideration of Belgian housing legislation. The number of houses built directly by municipalities is so small that they may be overlooked. Certain charitable societies, building associations, and industrial companies have erected houses, but these also are comparatively small in number. An interesting development, however, is the participation of public bodies in the promotion and financing of limited companies for the building of workmen's houses. A number of poor-law authorities and municipalities in Belgium have done this. The advantages claimed for this course over the ordinary method of municipal building are: (1) That the co-operation of all interested persons is possible. (2) That management by a board of directors is simpler than by a large public body. (3) That the financial responsibility of the undertaking does not rest solely with the communal council.

The communal councils of Anderlecht, Schaerbeek, Molenbeek, Mons, Courtrai, and Tournai, among others, have taken substantial shares in building companies.

A special enquiry, carried out with the kind assistance of the Minister of the Interior, revealed the fact that it is rare for urban communes in Belgium to own more land than is needed for immediate municipal purposes. They do not appear to have a consistent policy of acquiring

¹ It may be pointed out that there is nothing in the Belgian scheme to prevent houses being built co-operatively, several at a time, thus effecting certain economies over building houses separately.

and holding land for the purpose of influencing the future development of the towns.

Apart from the excellent Housing Act of 1889, the sum total of housing legislation in Belgium may seem meagre in comparison with the voluminous Acts of Parliament dealing with the subject in other countries. This is partly explained by the fact that wide powers of dealing with insanitary property are vested in the burgomaster of every commune. He can, absolutely on his own authority, issue a closing order against any house. There is no appeal against his decision, and the owner can claim no compensation. But the burgomaster is an elected official, who cannot act much ahead of public opinion, and therefore has rarely exercised his powers in the past. At the present time, however, burgomasters are becoming more willing to adopt a progressive policy, and much insanitary property is being done away with. This is a result partly of the educational work done by the *Comités de Patronage*, and partly of the higher standard with regard to housing set by the houses built under the conditions of the 1889 Act.

As this chapter covers much ground, it may be well briefly to recapitulate the conclusions arrived at.

Summing up the results of the investigation into the housing conditions of the working people in Belgium it may be said that the highest section of the working-classes, representing perhaps 10 or 15 per cent of the whole, is living in better houses than in Britain, while the houses of the middle section, representing perhaps 30 to 35 per cent, compare favourably with the corresponding class in Britain. Those occupied by unskilled workers and the poor generally vary greatly in quality. They are not so much concentrated in towns as in Britain, and to that extent are better; but at the bottom of this class is a number of slum dwellings, and the condition of some of these is perhaps worse than anything to be found in British cities. The writer's conclusion, after a careful study of the subject, is that the

Belgian housing conditions are somewhat better than the British. Rents are extraordinarily low. This is due primarily to the low cost of production, which varies from one-half to three-quarters of the cost of construction in York, a British town where the cost of building is not unusually high. The subdivision of land, railway facilities, and the fact that Belgian industries are not concentrated in towns, keep down the price of urban building land. Thus, in spite of very low wages, a smaller proportion of the total income of the working-class is absorbed by rent than is the case in Britain.

Lastly, the Housing Act gives facilities to workmen for becoming, on very favourable terms, possessors of their houses.

CHAPTER XXIX

THRIFT

It is not proposed in this chapter to attempt to estimate the total savings of the working classes of Belgium, but only to refer to those deposited in banks or other institutions which furnish statistics. Of course these represent only a small part of the whole. For instance, a peasant invests his savings in land and farm stock, and many an industrial workman elects to buy his house. It would be quite impossible to gauge the amount of savings of this kind, but still information concerning deposits in savings banks is of interest as showing how widespread is the spirit of thrift among the Belgians.

Of the thrift institutions by far the most important is the National Savings Bank, founded in 1865.¹ At the end of 1908 the depositors numbered over two-and-a-half million, representing more than one-third of the total population; the sum standing to their credit being £35,440,000, an average of £13:10s. per head.² For the last eight years statistics have been furnished annually which show that about 55 per cent of the new depositors

¹ It allows interest at the rate of 3 per cent on deposits not exceeding £80, and 2 per cent on those in excess of that amount. The interest paid by the Post Office Savings Bank in the United Kingdom is 2½ per cent on deposits not exceeding £200.

² In addition to the above, Government securities to the value of £18,920,000 were lodged at the bank. Any depositor may, if he so wishes, request the bank authorities to devote the whole or part of his deposits to the purchase, at the market rate, of public securities, thus obtaining a higher rate of interest than if he merely left the cash on deposit. Probably only a very small proportion of these public securities are owned by the working classes.

each year are children, and so it is not unlikely that at least one-third of those on the books of the National Savings Bank are under fourteen years of age. This large proportion is accounted for by two facts—first, that active steps are taken in all the elementary schools to encourage children to begin saving small sums, and every facility is afforded them for doing this;¹ and secondly, that in certain districts it is the custom for the commune to present every newly-born child with a bank book with a franc standing to its credit. Several thousands of these are given out annually, arrangements being made to prevent the children's parents from drawing the money out.²

The fact that most of the deposits in the National Savings Bank are very small seems to indicate that it is principally supported by working-class people, or at any rate by those with slender means.³ Further evidence of this is afforded by an examination of the list of new depositors during the last few years, classified according to their occupations,⁴ from which it would appear that about three-quarters of them belong to the working class. But this is not to say that three-quarters of the total sum in the bank belongs to them. Doubtless the average deposits of working men are smaller than those of depositors belonging to other classes, though the exact ratio between them cannot be estimated.

There are other savings banks besides the national one,

¹ On December 31, 1905 (the latest date for which particulars are available), of 1,129,260 children in the elementary schools, 431,897, or 38·2 per cent, had begun to save money, their total savings amounting to £461,320, or about 21s. each.

² It is reported that this custom has not been very successful in developing the habit of thrift, while by increasing the number of very small deposits it adds considerably to the labour of the bank officials. There are many such deposits which have been in the bank for years, but to which further sums are never added.

³ At the end of 1908

44	per cent of the total deposits was in sums of not more than 16s.			
18	" " " " "	" "	" "	from 16s. to £4
19	" " " " "	" "	" "	" £4 " £20
7	" " " " "	" "	" "	" £20 " £40
12	" " " " "	" "	" "	" £40 " £80

⁴ *Compte rendu, Caisse Générale d'Épargne, 1908, p. 14.*

but their transactions are small in comparison, and details need not be given. But there is one other form of saving affiliated to the National Savings Bank which is so widespread in Belgium that it merits attention, namely, the contribution to pension funds. These are very substantially encouraged by the Government, whose subsidies to them at the present time, together with those granted by the provincial and communal authorities, practically equal in amount the contributions made by individuals.

Under the system in vogue each payment made by a contributor purchases an annuity, and is treated quite independently of other payments which he may have made or may make. Thus a man who only paid one franc—the minimum payment accepted—could claim an annuity, if the fraction of a centime due to him were not below coinage level. Under this system every contributor gets full value for his contribution, but the inducement to make regular payments is less strong than if the annuity were conditional upon his doing so. Hence, though the number of people who at one time or other have paid premiums is very large—about one million, or one-seventh of the population, at the end of 1908—it is only too probable that a large proportion of them will never pay systematically enough to receive a pension worth having. With a view to remedying this defect, the Government strongly encourages the creation of pension societies, so organised that a member whose payments cease is looked up by the secretary and advised to continue. As a result of this encouragement the number of these societies, which stood at 107, with 5500 members in 1895, rose to 5526, with more than 650,000 members at the end of 1908.¹ Many have been

¹ The Government gives to the societies an annual subsidy of 1s. 8d. for every subscriber whose payments during the previous year have not been less than 2s. 5d., on condition that all accounts are properly kept. In addition it gives 6d. for each 10d. contributed by the subscribers, up to 12s. a year. In the case of subscribers born prior to 1860 the subsidy is higher, varying with the age. Those born before 1850 obtain 1s. 8d. for every 10d. they subscribe annually, up to 5s., and 6d. for every 10d. from 5s. 6d. to 19s. 2d. The societies have met with a considerable measure of success, but nevertheless a large number of the persons who

formed in the agricultural districts by the priests, who are doing their best to induce the people to contribute. It is found easier to secure regular payments in the country than in the towns, where there are so many other inducements to spend money. Almost all the societies are connected with the pension department of the National Savings Bank, which is under Government guarantee. Contributions are received at all branches of the National Bank, at post-offices and various other institutions, and also in the country by the postmen when they are delivering letters. The annual contributions are about £560,000, including State and other subsidies, or about 12s. per depositor. At the end of 1908 the accumulated funds amounted to over £5,240,000. It is estimated that at least 80 per cent of the contributors belong to the working classes, and here, as in the case of the Savings Fund, a large number are children who are actively encouraged to begin in early life. In 1904 there were 700 pension societies consisting exclusively of children, and in 1908 about 175,000 children between six and fifteen years of age contributed to pension funds.

At the end of 1908 about 22,000 persons were receiving pensions, but over two-thirds of them were receiving under 20s. a year, and only 8 per cent over £15.¹ Thus, although the movement is very widespread and the organisation for encouraging it is extensive, the individual pensions are not large; indeed, in many cases they are insignificant. Those now received, however, were subscribed for before active steps were taken to encourage more systematic contributions, and if this activity continues, began paying premiums have ceased to do so. According to statistics published in 1903, the number of those who had discontinued making payments was 17 per cent of the whole.

1	25	per cent of the pensions were under 5s. a year.
31	„ „ „	from 5s. to 10s. a year.
12	„ „ „	„ 10s. to 20s. „
16	„ „ „	„ 20s. to £5 „
8	„ „ „	„ £5 to £15 „
4	„ „ „	„ £15 to £29 „
4	„ „ „	„ £29 to £48 „

the pensions in future should be much more substantial. Recognising that those who have already reached old age had not such opportunities for self-help as are now offered, the Government, in 1900, passed a measure giving a pension of 52s. a year to workmen above sixty-five years of age who were in need. In 1907, 200,000 persons were receiving this.

Turning to other forms of thrift, the Friendly Society movement is warmly supported by the Government, which annually subsidises it to the extent of over £14,000. This is given in the form of grants varying from £5 to £8 to newly created societies, and from 16s. to £12 to societies whose accounts are well kept. An unsatisfactory feature of the movement is that for some years past the annual outgoings have exceeded the ordinary income and have been met by "extraordinary" income, *i.e.* by raffles and by the subscriptions of honorary members and donations from those interested in the movement. The actuarial basis of the societies is probably unsound, inadequate attention having been given to the fact that expenses increase with the average age of the members. The matter is, however, now being considered by some of the federations, and it is to be hoped that the societies may be placed on a sound footing.

The premiums and benefits vary from one society to another, but in many of them the premium is tenpence a month, and the sick-pay tenpence a day for three months, and fivepence a day for another three months. A number of the societies pay a contribution to the federation of which they are members, in virtue of which the latter continues the sick-pay of those who have run out of benefit in their local societies. The Government subsidises these federations, increasing their payments to members by sums varying from 20 to 60 per cent, according to circumstances.

Before passing to other matters, a few figures may be given enabling us to compare the development of thrift in Belgium with its development in the United Kingdom. Such a comparison can only be a rough one, for methods of saving vary in different countries. In Belgium, as already

stated, the savings of the agricultural classes are largely sunk in land and farming stock. In Britain, on the other hand, while there is comparatively little investment of this kind, many working-class savings are entrusted to the Co-operative and Friendly societies. The only sums which can be compared are those deposited in the Post Office and Trustee Savings Banks in the United Kingdom, and in the National Savings Bank in Belgium.¹ If this be done it will be noted that whereas one in three of the population in Belgium has deposits in the National Savings Bank, in the United Kingdom the proportion is one in four; while the sum deposited amounts to £4 : 15 : 6 per head of the total population, and £13 : 10s. per depositor in Belgium, and to £3 : 12 : 10 per head of the population, and £14 : 11 : 7

¹ The actual figures are as follows :—

	United Kingdom.	Belgium.
Estimated population . . .	1908. 44,100,000	1908. 7,423,633
Number of accounts open . . . {	11,018,251 ^(a) 1,788,033 ^(b)	} 2,624,991 ^(c)
Percentage of population having accounts {	12,806,284 25 ^(a) 4 ^(b)		} 35
Amount of deposit . . . {	£160,648,214 ^(a) 51,715,950 ^(b)	£35,440,000 ^(c) 18,920,000 ^(d)
Amount per head of population . {	£212,364,164 £3 12 10 ^(a) 1 3 7 ^(b)	£54,360,000 £4 15 6 ^(c) 2 11 0 ^(d)
Average amount per depositor . {	£4 16 5 £14 11 7 ^(a) 28 18 6 ^(b)	£7 6 6 £13 10 0 ^(c)

^(a) Post Office Savings Bank.

^(b) Trustee Savings Banks.

^(c) National Savings Bank.

^(d) Government Securities held by depositors in the National Savings Bank.

per depositor in the United Kingdom. If in the United Kingdom the sums in the Trustee Savings Banks be added to those of the Post Office Savings Bank, then the deposits per head of the total population are increased to £4 : 16 : 5 ; and if, in Belgium, the value of Government securities held by depositors in the National Savings Bank be added to their deposits in cash, then the average amount of savings per head of the total population in Belgium is raised to £7 : 6 : 6. It is a striking fact that in this relatively poor country, where wages are extraordinarily low, often not more than half as high as in England, the sum saved in the National Savings Bank is so much greater per head of the population than in Great Britain. Such habits of economy must benefit the working classes as a whole, even if a deposit sometimes means actual privation. It would be worth the while of those who are seeking to develop this form of thrift in other countries to study Belgium's methods—especially the facilities for saving given to children in the schools.¹

¹ To avoid possible misunderstanding the writer wishes again to state that the figures given in this chapter are not put forward as representing the *whole* of the savings of the working classes, but only those which are deposited in the banks named. At the same time he believes that the Belgian people are more thrifty than the British, though to prove this statistically would be extremely difficult, if not impossible.

On the other hand, the reader must not gather from the perusal of this chapter that the life of the Belgian, from cradle to grave, is one of unrelieved economy. It must be remembered that deposits can be taken out of a bank as well as put into it ; and this happens to a great many of those made by children, before their first communion, when new clothes and white dresses are needed. Moreover, a marked decrease in local deposits would probably be noted just before the *Kermesse*, or annual fair, when people give themselves up to frivolity.

CHAPTER XXX

PAUPERISM

IN this chapter it is proposed to discuss the question of pauperism with a view to showing, first, what proportion of the people is dependent, either in whole or in part, upon public charity for the means of subsistence; and, secondly, the effect of the system of distributing charity upon the economic position and moral character of the Belgian people. Let it at once be said that it is not possible to draw the sharp line of distinction between those who are and those who are not paupers that is drawn in Britain, where a man is only considered a pauper if he accepts relief through the medium of the Poor Law authorities. For in Belgium a great proportion of quasi-public relief is distributed through various agencies connected with the Church, and any statement of the extent of pauperism which ignored this fact would be incomplete and misleading. The whole system of poor relief is marked by an extraordinary carelessness and lack of co-ordination in the matter of statistics; it is therefore only by laborious investigation that the figures given in this chapter, incomplete as many of them are, have been obtained.

Until the days of the French Revolution, when Belgium fell for a time under the authority of France, the relief of the poor had been almost entirely in the hands of the Church. The revolutionary Government took away the property which had been administered by her for charitable

purposes, and soon after handed over a large part of it to committees nominated by the communal authorities, at the same time making each commune responsible for the care of its own poor. This local responsibility continues to the present day, and rests with about three thousand local bodies, which act practically without central control.

The committees for the relief of poverty are of two kinds, both nominated by the communal councils. By far the more important are the *Bureaux de Bienfaisance*, of which, with very few exceptions, one is found in each of the 2627 communes into which Belgium is divided.

The work of these is supplemented by the *Commissions des Hospices*, of which there are only 334. With unimportant exceptions, they confine their attention to indoor relief, and their responsibility for this is limited by the capacity of the buildings which they administer. All other poor-relief falls upon the shoulders of the *Bureaux de Bienfaisance*. In the great majority of communes, where there is no *Commission des Hospices*, the *Bureau de Bienfaisance* undertakes the administration of all poor-relief, both indoor and outdoor.

The history of poor-law legislation during the last century has been little more than a melancholy record of attempts made by those responsible for defraying the cost of caring for the poor to transfer the burden to other bodies. There has been but slight progress in developing such scientific treatment of the difficult problems calling for solution as would lead towards the reduction of pauperism. As a result of the efforts made to transfer financial responsibilities there are now no less than six different bodies which share the cost of poor-law relief. Mention has been made of the *Commissions des Hospices* and the *Bureaux de Bienfaisance*. If these have not funds sufficient, the deficiency must be met from the exchequer of the commune itself, or as we should say in England, from the rates. In order to distribute the burden fairly among rich and poor communes, a Common Fund has been established in each province, to which all its

communes must contribute sums varying according to their population and income.¹ The Common Fund constitutes the fourth source from which funds for the relief of the poor are drawn. The fifth and sixth are respectively the Province and the State. The exact proportion which each of these six bodies is called upon to pay depends upon the character of the relief to be given; whether, for example, it is for pauper-lunatics, for the aged and infirm, or for foundlings. It will not be necessary here to examine the complicated system by which this proportion is determined.²

The multiplicity of bodies responsible for providing poor-relief funds gives rise to constant disputes as to their respective liabilities—disputes which absorb an unfortunately large amount of the energy of the officials. The granting or refusal of relief is left absolutely and without appeal to the local administrators of public charity; but in practice no destitute person can be refused admission at least to the quasi-penal labour colonies at Hoogstraeten and Merxplas. The cost of maintenance of those admitted is charged to the communes to which they belong.

Before proceeding to a more detailed discussion of pauperism in Belgium, we must consider what percentage of the

¹ This Common Fund is only available for the education of the blind and deaf and dumb, and for the maintenance of lunatics. Its existence is said to lead to a certain amount of abuse, some of the poorer communes seeking to have their infirm persons classed as lunatics, so that they may become chargeable to the Common Fund rather than to the communal account.

² In 1899, according to official returns (unpublished), the sums spent upon poor relief were contributed by these six authorities in the following proportion:—

<i>Commissions des Hospices</i>	£329,390	25·9 per cent
<i>Bureaux de Bienfaisance</i>	243,595	19·1 „
Communes	330,997	26·0 „
Common Fund	130,658	10·3 „
Provinces	62,133	4·9 „
State	176,015	13·8 „
	<hr/>	
	£1,272,788	100·0 per cent
	<hr/>	

total population is receiving public relief of one kind or another. Unfortunately, no sooner does the student of this question ask for definite statistics than he finds himself face to face with a series of contradictory statements which almost defy elucidation. Some communes, for instance, when asked for returns by the Central Government, have given the number of families assisted, others the number of individuals in these families. Some have returned the number of beds in the institutions which provide indoor relief; others the number of people occupying these beds during the year. Some have only enumerated those permanently in receipt of relief; others have included cases of temporary assistance. Critical examination of these sources may eliminate errors to a certain extent, yet although every possible care has been taken, the figures given here must be understood to convey but a rough indication of the actual facts. Many of them could not have been presented at all but for the courtesy of the Minister of Justice, who has permitted the examination of unpublished statistics.

Let us consider first the number of those relieved by the *Bureaux de Bienfaisance*.¹ These bodies, as already stated, are responsible for the administration of all public poor relief, except in about three hundred communes where there are also *Commissions des Hospices*. The latest published statistics are those of M. van Overbergh, who was the secretary to the Royal Commission on Poor Relief of 1897 to 1900, and who estimates the average number of outdoor paupers in the period 1890 to 1894 at 380,755 per annum, or sixty-one for every 1000 inhabitants.² Un-

¹ The *Bureaux de Bienfaisance* bear the expense of assisting the poor in general, foundlings not provided for in *hospices*, lunatics not placed in an asylum, deaf-mutes and blind who are cared for in no special educational institution, able-bodied vagrants and beggars in the *Maisons de Refuge*. They also maintain the charity schools. They are not empowered to provide instruction, but they may pay the school fees of poor children. They may build houses for working men or for the poor. They must contribute according to their ability to the funds of the *Monts de Piété* (municipal pawn shops) and to the "Common Fund" (*Résumé de la Législation concernant la bienfaisance publique*, 1903, p. 11).

² The average population, 1890 to 1894, is taken as 6,201,070.

published figures which the writer has been permitted to examine at the Ministry of Justice, show the average number of separate persons annually assisted by the *Bureaux de Bienfaisance* during the years 1895 to 1899 to have been 355,442. As the number relieved appears to have been decreasing,¹ this average compares satisfactorily with M. van Overbergh's figures.² It must be remembered, however, that the figures inspected at the Ministry, as well as those of M. van Overbergh, are based upon returns supplied by the communes without any supervision. Careful investigation made personally in several communes inclines the writer to the belief that the number of persons actually assisted by the *Bureaux de Bienfaisance* is in excess, possibly in considerable excess, of the official figure. The statistics of most of the communes visited are so rough, and are compiled by such varying methods, that no certain conclusions can be drawn from them; but certainly their general tendency is to understate the numbers relieved. In the absence, however, of actual facts, the writer prefers not to put forward a higher figure, but to accept the official estimate (viz. 355,000) as approximately correct for the present time.³

¹ 1895	.	.	362,070
1896	.	.	361,727
1897	.	.	347,342
1898	.	.	357,133
1899	.	.	348,939

² The above figures vary greatly from those given by M. Beco in the *Rapport de la Commission de l'Art de Guérir* for the year 1891. Here the outdoor paupers are estimated at 742,538, *i.e.* 121 for every 1000 inhabitants. Upon examination, however, it appears that the two estimates are not really comparable, for while M. Beco has included all those who are "entitled to receive free medical relief," the other two estimates concern as a rule those only who have *actually received* it. In most parts of Belgium it is comparatively easy for the poor to have their names inscribed upon a list entitling them to free medical relief, and many poor families do this at the beginning of the year. Of course many who do so do not require medical attendance. M. Beco has included all those whose names had been inscribed upon the "Free Medical List."

³ It has not been found possible to establish any detailed comparison between the proportion of the population now in receipt of relief and that in

Turning now to the relief given by the *Commissions des Hospices*¹ (indoor relief), we are dealing with very much smaller numbers; for, as already stated, whereas almost without exception every commune has its *Bureau de Bienfaisance*, only 334 have *Commissions des Hospices*. In the great majority of communes, where there is no *Commission des Hospices*, the whole work of poor relief falls upon the *Bureau de Bienfaisance*. Unpublished figures, obtained from the Ministry of Justice, give the average number of individuals receiving indoor relief for the years 1895 to 1899 as 72,025—a figure which tallies with M. van Overbergh's estimate of 70,000 as the average for the years 1890 to 1894. The number is apparently increasing,² and we may reckon it as about 80,000³ at the present time (1909).

In order to arrive at the total number of persons receiving public relief in Belgium, four other classes of paupers must be considered. Fortunately, here we are furnished with accurate statistics. The number in each of the classes on December 31, 1904, was as follows:—

past times. A number of estimates have been published, referring to various dates and going as far back as 1828, but none of them will bear examination. They do, however, justify the conclusion that the proportion is a diminishing one.

¹ It will be remembered that certain communes in Belgium have endowments given to them for the purpose of providing indoor relief for different classes of poor persons. When such endowments have been granted, the communes have appointed committees called *Commissions des Hospices* to administer the funds. They undertake the assistance of the sick in their hospitals, of the old, the infirm, of foundlings and orphans in their *hospices*, of deaf-mutes and blind in special institutions, infirm vagrants and beggars in *Maisons de Refuge* and *Dépôts de Mendicité*, and children in charity schools.

² 1895	.	.	.	.	71,195
1896	.	.	.	.	71,985
1897	.	.	.	.	71,107
1898	.	.	.	.	71,968
1899	.	.	.	.	73,870

³ M. Beco's estimate of 30,967 as the number receiving indoor relief in 1891 is certainly wrong. He has given in many, if not in all cases, the number of beds in the various institutions, regardless of the number of those occupying them during the year.

In the Labour Colonies and Refuges of Merxplas, Hoogstraeten, etc.	7,384
Children maintained in boarding schools at the public expense	2,297
Pauper lunatics	16,729
In blind schools and deaf and dumb institutions	7,207
	<hr/>
Total	<u>33,617</u>

The above figures denote the number of persons in residence upon a given day, and not the total number of inmates during the year. For this reason, and also because some of these classes are on the increase, the total number of persons who spend the whole or part of each year in these institutions at the present time may be estimated as 36,000. Taking this figure, we find that 471,000 persons are annually receiving public relief in Belgium. This estimate, as already said, must be received with caution, but as it is based upon very careful examination of the available data, it may be regarded as approximately accurate. Upon the basis of this figure it appears that out of every thousand persons, sixty-six receive public relief of one kind or another.¹ Excluding 2600 lunatics and vagrants, the number is 62 per thousand, which is much higher than the corresponding figure for the United Kingdom, viz. 49·5 per thousand.²

In this calculation no account has been taken of privately organised charity. When it is remembered how widely this is distributed by the Church, it will be readily perceived how large must be the proportion of the people of Belgium who, in greater or smaller measure, receive charitable assistance.

In considering the Belgian relief statistics the reader must not forget that public poor relief is much more readily granted in Belgium than in England. In the latter country it is given, theoretically at any rate, only to the destitute. In Belgium, as will be shown later in this chapter, it is

¹ Total population taken as 7,160,547 (1905). The figures refer to all who receive relief during the year.

² In 1906-7. See *Report of the Royal Commission on the Poor Laws*.

distributed, often in exceedingly small amounts, to those who, although poor, could not be described as destitute. Frequently the relief consists only of a few loaves of bread, or a few sacks of coal in the winter, the total value of the goods given to a family in the course of a year not exceeding 4 to 8 shillings.

Having established, with as much accuracy as the available information will allow, the number of persons in Belgium who receive relief from public funds, we may proceed to examine the methods employed for relieving distress, and discuss their social and economic effects.

Let us again begin with the *Bureaux de Bienfaisance*. These, it will be remembered, are committees appointed by the communal councils, and charged with the administration of all relief except that undertaken by the *Commissions des Hospices*.

The income of the *Bureaux de Bienfaisance* is derived from various sources. Half (48 per cent) of it comes from taxes levied upon the communes, and the bulk of the remainder from land or other property owned by the different local *Bureaux de Bienfaisance*.¹ Unfortunately, information is not available regarding the exact objects upon which the *Bureaux de Bienfaisance* expend their income. Half a century ago such accounts were published in great detail, but in recent years little has been ascertainable besides the total sum expended. The writer has, however, obtained access to unpublished statistics, which show that in 1899, the latest year for which detailed information was available, the total expenditure of the *Bureaux de Bienfaisance* amounted to £477,066. Of this, 39 per cent was for old and infirm people, 11 per cent for orphans, and 50 per cent for other persons, of whom more than half were assisted throughout the whole year.

¹ The proportion of the income of the *Bureaux de Bienfaisance* derived from taxation is steadily increasing. In 1858 it only amounted to 16 per cent. The proportion varies greatly from commune to commune. In Namur, for instance, 85 per cent is from taxation, as compared with 14 per cent in Limbourg. Generally speaking, the Walloon provinces derive a larger portion of their income from taxation than the Flemish.

The relief administered by the *Bureaux de Bienfaisance* amounted in 1899 to 1s. 5d. per head of the population, or an average of 27s. for every person assisted.¹

The smallness of the average sum paid in relief is very noticeable. Even allowing for the fact that some of the cases only received medical relief, the figures indicate how general in Belgium is the policy of making very small grants to a large number of persons. As the amount

¹ The figures per province for the year 1899 are given in the following table:—

PROVINCE.	No. of Inhabitants.	Total Relief administered.	Cost per head of Total Population.		No. of Persons relieved.	Percentage of Total Population relieved.	Amount paid per Person relieved.	
			£	s. d.			s.	d.
Antwerp . . .	819,159	57,860	1	4 $\frac{3}{4}$	37,738	4·60	30	2
Brabant . . .	1,263,807	96,922	1	6 $\frac{1}{4}$	102,229	8·09	19	0
West Flanders . . .	805,236	90,622	2	2 $\frac{3}{4}$	72,759	9·04	24	7
East Flanders . . .	1,029,971	75,745	1	5	37,702	3·66	39	8
Hainaut . . .	1,142,954	62,782	1	1	33,413	2·92	37	3
Liège . . .	826,175	44,358	1	0 $\frac{3}{4}$	25,993	3·15	34	1
Limbourg . . .	240,796	18,414	1	6 $\frac{1}{4}$	18,030	7·49	20	7
Luxembourg . . .	219,200	9,277	0	10	4,544	2·08	40	5
Namur . . .	346,512	21,086	1	2 $\frac{1}{2}$	16,531	4·77	25	4
The KINGDOM	6,693,810	477,066	1	5	348,939	5·21	27	1

It will be remembered that the statistics regarding the number of paupers are very unsatisfactory, and that any estimate based upon these figures must be somewhat rough.

The cost of poor relief per head of the population is exceedingly high in West Flanders. It is lowest of all in Luxembourg, where the amount is little more than one-third of that in West Flanders. Speaking generally, it is higher in the Flemish than in the Walloon provinces; but the sum paid per person relieved is higher in the Walloon provinces than in the Flemish. The reason for this appears to lie partly in the smaller amount of poverty found in the Walloon provinces, but also in their superior administration of relief. The people are more independent; they have not been accustomed, by the historic existence among them of rich charitable institutions, to look for public support in distress to the same extent as the Flemish. It is interesting to note that West Flanders, which pays so much more in relief than the other provinces, is also positively flooded with other charitable agencies.

In England and Wales the average cost per outdoor pauper (excluding expenditure out of loans) for the period 1902-1906 was £6:17:6 (Cd. 3665, p. 405), but, for reasons which need not here be entered into, this figure is really not comparable with the Belgian statistics.

given in 1899 averaged only 27s., it is obvious that many families received so little that they could probably have pulled through without it. It may be urged that this does not follow, that sometimes a very little relief given carefully and at a critical moment may just suffice to prevent a family from becoming destitute. This, of course, is true; but the writer has satisfied himself, both by enquiry and personal investigation, that the large number of small charitable doles revealed by the statistics cannot be justified in this way.

That there is no clearly defined policy in the administration of public relief in Belgium is not surprising when it is remembered that in a country whose size and population are both less than double those of Yorkshire, this administration is undertaken by about three thousand local committees without effective supervision or control from any central department. Some of these committees are comparatively wealthy, large sums having been left to them by charitable persons, or the land originally granted to them having greatly increased in value. Others are exceedingly poor.

An examination of the facts shows clearly that the number of paupers varies in proportion to the wealth of the *Bureau de Bienfaisance*. Compare, for instance, two groups of communes in the rural districts of West Flanders. In the one, containing twenty-one communes, the *Bureaux de Bienfaisance* are rich, the funds at their disposal being sufficient for an annual payment of more than 4s. 9d. per head of the population. In the other, containing twenty communes, they are poor, their annual income amounting on the average only to 3d. per head of the population.¹ The first group has 27,761 inhabitants, the second 74,179, or almost thrice the number. Now, though the economic conditions of the two groups are similar, we find that

¹ These figures refer to income derived from endowments, or to gifts made by private benefactors; they do not take into account any income derived from taxation. As, however, the amount of such income is never very great in country districts, this fact will not interfere with the conclusions drawn from the illustration.

where the *Bureaux de Bienfaisance* are rich, the number of old and infirm persons receiving outdoor relief is exactly three times as great, in proportion to the total population, as where they are poor! The rich communes assist, in proportion, twice the number of orphans, and dispense permanent relief to almost four times as many persons. In fact, those who receive permanent outdoor relief are actually more numerous in the rich communes, with their total population of 27,761, than in the poor communes, with their total population of 74,179; while the extent of the distribution of temporary outdoor relief is also much greater. The proportion of persons in receipt of either one or the other in some rich communes is veritably appalling. For instance, in the communes of Proven Steenkerke, Oude Capelle, and Stuyvekenskerke 20 per cent or more of the total population receive outdoor relief, while in Mannekensvere the extraordinary proportion of no less than 40 per cent is reached. These communes are situated in a rural district, where agriculturists are crying out aloud for workers, and are prepared to accept almost any able-bodied person who offers his services.

There is not the least doubt that in many communes throughout Belgium public relief is used as a means of influencing votes for party purposes. This is almost inevitable in a country where party feeling runs so high, and party divisions enter so deeply into the social life. As previously shown in this volume, it is the rule rather than the exception in Belgium to find that in a given locality Catholics, Liberals, and Socialists have their separate trade unions, co-operative societies, and cafés. Indeed, the greater number of the social institutions of Belgium are divided into political camps, each working for its own members and excluding from its benefits the members of the opposing camps. This being so, the natural result is that if in any locality the Liberals or the Socialists are in power, they feel that in the administration of public relief members of their own parties have a special claim upon them; and in the same way the Catholics, when in power, favour members

of their party. Such action, though illegal and unjust to the poor, is very widespread. It is most marked in the small towns and rural districts; in the large towns it is found least, sometimes not at all. The writer has continually come across cases where party influence has been most strongly exerted in connection with the administration of poor relief. Of course, being illegal, it is exercised in such a way that no definite charge can be brought home; but of its existence, and of the great freedom with which it is used, there is no doubt whatever. It usually leads to greatly increased liberality to persons belonging to the party in power, and to a free distribution of relief immediately before elections. Again, the granting of relief is sometimes made dependent upon parents sending their children to a particular school. After considerable enquiry the writer has failed to discover a single instance in Belgium where a change in the political majority in the communal council (which, it will be remembered, appoints the committees that administer public relief) has not been followed by a corresponding change in the *personnel* of the relief committee. In Great Britain the disenfranchisement of paupers tends to prevent corruption of this kind, but in Belgium the receipt of public relief carries with it no loss of civil rights.

While the condition of things just described is very general in Belgium, there are certain communes, some of them quite small, where the administration of poor relief is both intelligent and free from political bias. The writer has personally encountered instances of this kind, both where the administrators were Catholic and where they were Socialist and Liberal. In these communes a really earnest effort was being made so to administer poor relief as to strengthen a sense of independence among the poor, and thus to reduce pauperism. Frankness, however, compels the statement that such communes are rare exceptions to the general rule.

The English observer is specially impressed by the calibre of those willing to serve upon the *Bureaux de*

Bienfaisance or upon the *Commissions des Hospices*. These bodies have little difficulty in securing the best men, and an enormous amount of unselfish work is undertaken without payment. Party spirit enters into it to a greater extent than in England; but then, as explained elsewhere, the Belgian point of view is widely different.

Poor relief is often given, in Belgium, to those in receipt of low wages, especially if there is a large family, and the tendency of such a policy must undoubtedly be to keep the level of wages low.

To show the extent of this practice, which cannot but have a demoralising effect upon a large part of the working-class population, the example of Ghent may be examined—not as an exceptional, but as a typical instance.

We find accordingly that in Ghent,¹ in 1906, a year of industrial prosperity—

1183	families	received	poor	relief	on	account	of	low	wages	and	large	families	of	children.
2687	”	”	”	”	”	”	”	”	”	”	”	”	”	sickness, disablement, and old age.
483	”	”	”	”	”	”	”	”	”	”	”	”	”	temporarily during the winter.
640	”	”	”	”	”	”	”	”	”	”	”	”	”	during confinement of the wife (1s. 7d. each).

Thus in nearly a quarter of the cases in Ghent poor relief was given as a supplement to low wages.

The writer also obtained information regarding the condition of twenty-four families in Courtrai who, when visited in connection with his housing enquiry² in 1908, were found to be in receipt of out-relief. In only two of the twenty-four households was the head unemployed, in both cases on account of old age (one of them being in receipt of the State pension of £2:12s. per annum). The average size of the families was four adults and four children, and the average earnings 17s. 10d. per household. The poor relief amounted to 9d. a week in one case, 10d. in thirteen cases, 1s. 3d. in three cases, 1s. 8d. in two cases, 5d. and

¹ The population of Ghent in 1900 was 160,133.

² See Chapter XXVIII.

payment of rent in two cases, payment of rent only in one case, while in two cases the amount was not ascertained. On the average, the relief per family (assessing the value of rent at 1s. 8d.) amounted to 1s. per week, or an addition of $6\frac{1}{4}$ per cent to the income. Thus it will be seen that the relief administered to supplement wages is too low effectually to raise the standard of comfort.

It is not necessary to dwell upon the dangers of a policy of this kind. The comparative smallness of the doles, and the fact that they are not given universally but only in some parts of the country, prevent the consequent lowering of wages from reaching really serious proportions, but the principle involved is the same that led to the terrible social crisis experienced in England before the reform of the Poor Laws in 1834.

That the grants made to supplement low wages tend to keep wages down, was frankly admitted by a large employer of labour in a conversation held in the course of this enquiry. He said wages were higher in his commune than in some of those in the neighbourhood, because the *Bureau de Bienfaisance* was poor and could not supplement them. Where it could, the workmen were content to take a lower wage, expecting the *Bureau* to make up the deficiency.

Let us now consider the work of the *Commissions des Hospices*. These, as already stated, are local committees appointed by the communal councils to administer indoor relief. In 1899 there were in all 334 of these committees in Belgium. The division between their work and that of the *Bureaux de Bienfaisance* is by no means clear, for where the *Commissions des Hospices* are rich and the *Bureaux de Bienfaisance* poor, indoor relief is largely administered; where the reverse is the case, or where there is no *Commission des Hospices*, outdoor relief is the rule.

Except in two or three communes the two bodies are entirely distinct and separate—an arrangement leading to much waste and fatal to systematic work. It is as though, in England, there were two entirely separate Boards of Guardians—one to administer indoor, the other outdoor

relief, with no co-ordinating link between them. The *Commissions des Hospices* are by no means evenly distributed over the country. Almost half of them (157) are found in the two Flanders, 49 in Brabant, 44 in Hainaut, 30 in Liège, 28 in Antwerp, while Namur and Luxembourg have only 9 each, and Limbourg only 8. The *hospices* in Brabant are the richest of all, owing to the existence of so many wealthy foundations in Brussels; they expend annually about £130,000 (£126,780 in 1899), nearly one-third of the combined expenditure of the *Commissions des Hospices* throughout the country.

From such information as is available it appears that of those relieved in 1899, 11,557 were more than seventy years of age, and 7907 others were too old and infirm to follow their occupations. These two classes together represent 26 per cent of the total number relieved. To them must be added 7583 orphans, 1067 persons injured in connection with their work, and 45,756 (or 62 per cent of the whole) classed under the vague heading, "Other poor persons." Personal enquiry in search of further particulars of this class has proved unavailing; probably, however, most of them were sick persons in hospitals, for upon the *Commissions des Hospices* falls the responsibility for such work as in England is done by hospitals supported by voluntary contributions.

The figures relating to indoor relief in Belgium are also very unsatisfactory. According to official statistics (unpublished) the total cost in 1899 was £426,834.¹ Of this sum 23 per cent is derived from taxation, the remainder from the land or other properties with which the *Commissions des Hospices* were originally endowed, or which have been presented to them since.² The cost of relieving the different classes of paupers is as follows:—

¹ These figures do not apparently in all cases include the entire cost of administration.

² Some fear is occasionally expressed at the increase in landed possessions of the *Bureaux de Bienfaisance* and of the *Commissions des Hospices*. The latest statistics which show the exact extent of these are for the year 1864. At that time the *Bureaux de Bienfaisance* owned 99,000 acres, and the

	Number assisted.	Per cent.	Cost.
The aged of more than seventy years .	11,557	15·7	£ 95,272
The aged and infirm persons who are unable to earn sufficient to keep themselves .	7,907	10·7	70,983
Orphans	7,583	10·2	74,515
Other paupers	45,756	62·0	180,808
Paupers injured during work .	1,067	1·4	5,256
Total	73,870	100·0	426,834

This table shows that the average cost of indoor relief amounted in 1899 to £5 : 15 : 2 per head of those relieved.¹

This figure, however, includes a number who may only have been relieved for a very short time. Most of these will be found among the last two classes in the above table, namely, "Other paupers" and "Paupers injured during work." If we omit these, the average cost per person relieved was £8 : 18 : 5. To explain why the figure is so low it will be necessary briefly to consider how indoor relief in Belgium is organised.

Except in a few isolated cases, it is not administered on the English principle in institutions directly controlled by the Poor Law authorities. One of three different systems is generally adopted. Under the first of these the *Commissions des Hospices* themselves conduct, through a secretary, all business matters connected with the *hospices* under their authority. They also appoint all lay members of the staff, but the direct care of the inmates is handed over to a religious order, whose members receive from the *Commission* a fixed salary, usually from £8 to £12 a year.

Commissions des Hospices 91,279 acres—together 2·6 per cent of the total area of the country. The exact amount of property presented to these bodies since 1864 is not known, but it is improbable that their total possessions amount to more than 3 per cent of the land of the country at the present time. Owing to the labour and cost of maintenance of landed property there is a tendency at present for the *Commissions des Hospices* to sell their land and to purchase State securities.

¹ In England and Wales the average cost per indoor pauper (excluding expenditure out of loans) for the period 1902 to 1906 was £28 : 6 : 2 (Cd. 3665, p. 405), but this figure is not really comparable with the Belgian statistics.

Under the second system the financial management, as well as the personal care of the inmates, is largely handed over to a religious congregation, which furnishes the *Commissions des Hospices* with monthly accounts of the expenditure incurred. The third system, which is universally practised in the case of communes where there is no *Commission des Hospices* (*i.e.* in seven-eighths of the communes of Belgium), as well as in some where there is one, is to send those persons who require indoor relief to be cared for in convents or in *hospices* situated in other communes, where places are vacant. Many convents in Belgium are willing to undertake work of this kind at fixed rates, which are so low as to render competition from public authorities practically impossible. This explains why, with the exception of the Government institutions at Merxplas, etc., practically all indoor relief, including the work of hospitals, asylums, deaf and dumb and blind institutions, is increasingly being undertaken by the Church. "Why," it may be asked, "should the Church be willing to undertake this responsibility upon such low terms?" The answer is that the administration of charity is regarded by Catholics as a sacred duty. They consider that charity should be administered by the Church, and that the atmosphere of the institutions in which indoor relief is given should be religious (*i.e.* Catholic). In order to create this atmosphere hundreds of devoted women consecrate their lives to superintending the *hospices* for scarcely any payment beyond the bare cost of very simple living. Under such circumstances competition from institutions which have to pay ordinary salaries to their staff becomes impossible.

The following words of M. A. Beeckman offer an interesting confirmation of the above. While addressing a meeting of the Royal Commission on Poor Law, March 25, 1897, he said: "At present, as everybody will agree, the Catholic charities are by far the most prosperous, the most effective, and the most extensive. They relieve every kind of misery, assist all who are in misfortune, and care for all who are infirm. What gives them this power, what

renders them capable of a devotion which knows no limits and explains their success, is the fact that they are connected with the Church. And you want to sever this connection which is their strength and might? We shall never consent to it. You want to impose upon us religious neutrality? But, for the Catholic, neutrality is almost as much to be condemned as active hostility."

The remuneration which the Catholic communities are willing to accept for their care of the aged, the sick and infirm, and orphans is almost incredibly low. The *Moniteur belge* for January 27, 1906, publishes a list of the charges made by a number of *hospices* for the maintenance of old and infirm people. This list embraces the whole of Belgium, with the exception of East Flanders. The figures show that in the Flemish portion of Belgium thirty-four out of forty-seven institutions will undertake the charge of an infirm person for less than 9d. per day. Some of them ask only 3 $\frac{1}{3}$ d., and none ask more than 1s. 0 $\frac{1}{2}$ d. In the Walloon districts the charges are higher. Particulars of them are given for twenty-four institutions, in only four of which they fall so low as 8 $\frac{1}{2}$ d., while in seven 1s. 0 $\frac{1}{2}$ d. or more is charged. The highest charge in the whole of Belgium is 2s. 8d. per day.¹ It must further be remembered that these figures include the whole cost of maintenance, not only food, but clothing, washing and attendance, and upkeep of buildings. Low as they are, however, they are subject to reduction in certain cases, and even the lowest are considerably higher than those in vogue fifty or sixty years ago, when charges of 1d. a day were not unknown! The fact that higher prices are charged in the Walloon districts than in the Flemish is interesting, and confirms the view that the standard of comfort in the former is higher. The lowest figure at which the infirm are cared for in the State institutions—particulars of which are given later—is 1s. 2 $\frac{1}{4}$ d. a day. Hence it is not surprising

¹ The above figures refer only to *hospices*, *i.e.* institutions ultimately controlled by *Commissions des Hospices*, although under the immediate direction of various religious orders. They do not refer to convents, for these publish no figures.

that communes anxious to limit the cost of poor relief prefer to send their infirm citizens to *hospices* and convents.

The writer has visited a number of these, and has often been impressed by the spotless cleanliness of the rooms and the kindly and devoted care of the "Sisters" in charge. The food also seems wholesome and adequate, while the healthy occupations found for practically all inmates not entirely incapable form a pleasing contrast to the aimless and pathetic "waiting for death" which depresses the visitor to some English workhouses. The women are usually employed in knitting or lace-making, and the men on the farm or vegetable garden. The women's work is sold for their own benefit, while the men are rewarded for theirs either by better food or a small *pourboire* at the end of each week.

The *hospices* and convents visited represent, needless to say, only a small proportion of the whole, and as there is absolutely no Government inspection, information cannot be given as to the remainder. That the conditions are not always so satisfactory as those described above, is made clear by the fact that men frequently seek to be transferred from privately managed *hospices* to the State institutions at Merxplas and Hoogstraeten, with their somewhat severe and semi-penal management. Some communes try to counteract efforts of this kind by promising the men a small weekly sum as pocket money so long as they will stay in the private *hospices*. The following extract from a letter sent to the writer by a friend in Belgium also points to the fact that the conditions are not always good. "I myself," he says, "ten years ago, had a servant whose old mother was being cared for in a convent in East Flanders. My servant went pretty often to see her, and each time returned complaining that she was not kept clean, and was often left alone for hours when she was ill. Her linen was hardly ever changed and she did not get enough to eat. Her son, in order to be near his mother, got a job as gardener at the convent, where, instead of an ordinary wage, he received only a few centimes a day" (in

addition to board and lodging). "We must not, however, blame particular individuals in this connection. Daily contact with misery somewhat hardens the hearts even of these good Sisters. Sorrow embitters, and it cannot be supposed that with 2 $\frac{3}{4}$ d. a day very much can be provided in the way of comfort, especially when it is remembered that the overhead charges of the establishment must be paid. We may be certain that the Sisters in these convents do not themselves live luxuriously."

Unfortunately, as the privately managed institutions publish no accounts, we do not know exactly what economies enable religious congregations to make such remarkably low charges for the maintenance of those placed under their care. One noteworthy economy is found in the wages of superintendence, for, as already stated, the *hospices* and convents are staffed by those who undertake the work, almost without salary, from a sense of religious duty. Besides effecting economy, this fact has an important influence on the tone of the establishments.

It has already been stated that in Belgium hospitals for the sick are placed under the charge of the *Commissions des Hospices*, who generally arrange with Catholic religious congregations to administer them as they do the *hospices*. The charges made are exceedingly low. Similar methods prevail with regard to orphanages, which are usually attached to a convent. There, again, remarkably low charges are made. The convent of Heule in West Flanders offers to receive orphans at £3 a year. Other orphanages will accept them at prices ranging from £6 a year upwards. If, however, those who send the orphans to the institutions undertake that they shall remain till they reach their majority, the charges are considerably lower. Some orphanages take the children for nothing, others at fees varying from £4 to £6 per annum. These figures refer to the Flemish provinces. The number of orphanages is much smaller in the Walloon provinces, and the charges made are higher, as in the case of the *hospices*. The low charges are, however, largely accounted for by the great

amount of work performed by the inmates. Every convent is a busy centre of industry, sewing, corset-making, glove-making, lace-making, and laundry work being the chief occupations. Their competition is much resented by some of those engaged in outside industries, who consider it unfair that they should have to compete with institutions whose workers are not paid wages, and whose workrooms are never visited by the factory inspector. This competition is the more serious because a number of those brought up in the orphanages, feeling themselves unfitted for ordinary life, and having become attached to the Sisters under whose direction they have lived for so long, stay in the establishments after reaching their majority, and continue to work for nominal salaries.¹

Much of what has been said about orphanages applies also to lunatic asylums, the control of which has passed almost entirely into the hands of the *Frères de la Charité*, who are willing to undertake the care of the insane at fees which defy competition. For many years a large proportion of the insane in Belgium have been boarded out among the peasants in Gheel, in the province of Antwerp, and Lierneux, in the province of Liège. They live as members of the family, giving such help as they can in field work. At Gheel the peasants are paid sums varying from 8½d. to 1s. 0½d. per day, at Lierneux rather more. But the practice of boarding out the insane in this manner tends to decline, for the Catholics now receive

¹ The following rules published by one of the orphanages, which may be taken as more or less typical, show how little opportunity is granted for intercourse with the outside world. This lack of healthy intercourse is to be regretted, for it tends to unfit the children for ordinary life after they quit the protecting walls of the orphanage.

(1) Relations, guardians, or patrons are required to leave orphans in this establishment until the age of twenty-one.

(2) No permission to go out with any person whatsoever is accorded. Instructive and recreative walks are organised from time to time.

(3) Visits to pupils are permitted twice a month, from half-past one to six, Sundays and legal fête days excluded.

(4) The establishment will only undertake to place its charges, and to furnish a trousseau in accordance with their merits, if they remain until they reach their majority (Rules of the orphanage of *St. Vincent de Paul* at Bruges).

them into asylums at very low fees—in Flanders, 9½d. per day and upwards. There are forty-three private asylums in Belgium, and three State asylums which are entrusted to the care of religious houses. These undertake to care for the patients at daily charges of 8½d. and upwards.¹

LABOUR COLONIES

Before we proceed to a consideration of privately organised charitable relief, a word must be said with reference to the large labour colonies at Merxplas and Hoogstraeten. These are not under the control either of the *Bureaux de Bienfaisance* or of the *Commissions des Hospices*, but are managed directly by the State.²

Although these two large colonies profess to be distinct in character, in practice their methods differ little. The colony at Merxplas is called a *Dépôt de Mendicité* and is distinctly penal, while the colony at Hoogstraeten, to which is joined that of Wortel, is a *Maison de Refuge*, and chiefly harbours persons who are old and incapable.

In Belgium vagrancy and mendicity are penal offences, and all persons found homeless or begging and without visible means of support, may be arrested and sentenced by a police court to detention at either Hoogstraeten or Merxplas. If the destitution which leads to begging is due to no fault of his own, the person arrested is sent to Hoogstraeten, but if he is a confirmed beggar or has a bad character he is sent to Merxplas. In both cases the term of commitment varies from a minimum of two years to a maximum of seven years. It is also possible for the destitute to apply for admission to the House of Refuge, and, as a matter of fact, voluntary entries are still frequent, although diminishing.

¹ The sums actually paid in the three State institutions vary, the minimum being 1s. 1½d. per day, but 4d. to 4½d. of this is repaid by the religious houses to the State as a rent for the use of the premises.

² Full accounts of these two colonies are to be found in the two reports of the Board of Trade on *Agencies and Methods for Dealing with the Unemployed* of 1893 (C. 7182) and 1904 (Cd. 2304), also in many recent publications on the subject of unemployment.

When these institutions were inaugurated nearly a century ago, and also when their organisation was remodelled in 1891, it was hoped that they would lead to the gradual reclamation of the vagrant class. This hope has not been fulfilled. So far from being reduced, the number of entries is increasing year by year. In the Beggars' Depots it rose by regular stages from 2535 men in 1898, to 3316 in 1904, while in the Houses of Refuge it has remained more or less stationary, amounting in 1904 to 3465. During their term of confinement at Merxplas the inmates have the opportunity of earning a small wage, part of which may be spent in little luxuries purchasable at the canteen, and the rest saved until they go out. It frequently happens that the savings of seven years are squandered in one great debauch after liberation. In such cases the individual, being without any means of support and having no intention of working, soon finds himself sentenced to a fresh term of confinement. How frequently a man once committed to Merxplas returns may be seen from the fact that of 5110 persons detained there in 1904, only 5·9 per cent were there for the first time, whilst 72 per cent had returned at least four times.

An institution such as Merxplas, harbouring over five thousand men—men describable only as human wreckage, governed by military discipline and patrolled by soldiers carrying loaded muskets—is not the place in which an atmosphere favourable to moral reform can be created, no matter how earnest may be the efforts of the officials. These State institutions, in an ever-increasing degree, are developing into permanent asylums for those ruined by drink, for the indolent, the incapable, and the old.

On the 31st of December 1904, 38 per cent of the men and $15\frac{1}{2}$ per cent of the women in the Houses of Refuge, and 12 per cent of the men and $16\frac{1}{2}$ per cent of the women in the Beggars' Depots, were over sixty years of age. Three-quarters of the men in the Houses of Refuge and half in the Beggars' Depots were over forty.

The existence of these large labour colonies and refuges,

and the huge number of private charities, which some of the poor know full well how to exploit, explains the absence, in Belgium, of the really destitute people who may be met with in other countries. The fact is, that unless the destitute can succeed in living on charities they are taken to a labour colony. The Government does not permit them to remain at large.

UNOFFICIAL CHARITY UNDER THE CONTROL OF THE CHURCH

So far we have dealt only with poor-relief paid for from public funds. There is, however, in Belgium as in other countries, an enormous amount of charitable relief other than that granted by public bodies. In view of the fact that the various poor-relief authorities administering public funds make use of private institutions in which to board out the paupers for whom they are responsible, it is impossible in Belgium to draw the sharp line between public and private charity that is drawn in England. Paupers maintained from the public Exchequer frequently occupy the same institutions as people cared for at the cost of the Church or of private benefactors, or even paying for their own board and lodging.

One of the chief sources of information upon privately administered charity in Belgium is *Belgique charitable*.¹ An examination of the 600 or more pages of this volume conveys some idea of the wonderful network of charitable institutions with which the country is covered, and of the danger of pauperisation if the charities are not wisely administered. Any detailed statement of the specific charities would, of course, be impossible here, nor would it serve any useful purpose. There are charities for helping the poor at every stage of their existence—a fact made clear in the introduction to the work, where we read: “The charitable desire to make provision for the infinite variety of cases not dealt with by official relief has given

¹ *Belgique charitable*, new edition completed by Mme. Ch. Vloeberghs, Bruxelles, *Librairie nationale*, 1904.

birth to this constantly increasing multitude of institutions and of private works of charity, whose comprehensiveness we admire;—a multitude, thanks to which one may say that from their conception to their last breath the poor can find sources of help and support through whatever hardships they may have to pass. . . .

“ Before the mother has brought her child into the world, before she can be received into one of the public maternity institutions, she sees the doors of a mothers’ refuge open before her, where pitying hearts and gentle hands will surround and comfort her in view of the ordeal she is about to pass through. Scarcely has the child been born than there await it special charities, distribution of baby-linen and clothing, visits of nurses, free milk depots, etc. A little later there are the crèche, the nursery, the infant school, and the kindergarten ready to receive and care for it, thus permitting the mother to return to her work at the factory or elsewhere. . . .” And so the list of charities proceeds, detailing the provision made not only for every stage of childhood among the poor, but for the sick and infirm, the suffering and needy, until we read, in the concluding paragraph: “ Then, as the life spent in poverty approaches its end, there appear associations for the help of the dying, for burying the dead, for providing funerals for the indigent. . . .”

It will readily be understood that the independence of people so immersed in charitable agencies is seriously threatened.

Any accurate estimate of the extent of private charity is impossible; but some idea of it can be given. The subject will best be considered under two headings, viz. charities administered directly by the Church and those administered by laymen. How widespread are the former may be gathered by ascertaining the proportion of the members of religious orders who are engaged in charitable work. In the first place, the total membership of these orders has more than trebled between 1846 and 1900. At the latter date there were 2500 in Belgium, with a membership of 38,000,

of whom 6000 were men and 32,000 women.¹ Of these, 14,000 were engaged in teaching, the rest in charitable work of one kind or another, sometimes combined with teaching. Such numbers make it clear that, besides superintending practically all public indoor relief, the Church must be responsible for a large amount of other charitable work. Indeed, she may be said to undertake almost the whole of it, at any rate in the Flemish part of Belgium. This is notable in West Flanders, where, out of a total population of 800,000 there are 5716 female and 605 male members of religious orders engaged in distributing charity, and the number is constantly increasing. The fact that, in spite of the extraordinary development of private charities, there is a greater amount of pauperism in West Flanders than in any other Belgian province is suggestive!

In the Walloon provinces the development of charitable institutions is much less marked, and the Church is less concerned with their administration. In all parts of Belgium, however, a large proportion of the relief passes through her hands, and the total amount of charity is very great.

¹ The growth in the number of members of religious orders in Belgium is indicated in the following table. It should be noted that for the year 1900 branches of convents and monasteries are counted as separate institutions, although there may have been only one or two persons living there. In the preceding censuses the branches were not separately enumerated. This fact accounts for the great increase in the *number of orders* between 1890 and 1900.

	1846.	1856.	1866.	1880.	1890.	1900.
No. of orders . . .	779	993	1,322	1,689	1,775	2,474
No. of members—						
Men	2,051	2,383	2,991	4,120	4,775	6,237
Women	9,917	12,247	15,205	21,242	25,323	31,668
Total	11,968	14,630	18,196	25,362	30,098	37,905
Per ten thousand of the population . . .	28	32	38	46	50	57

LAY CHARITIES

Let us proceed to the consideration of what may be termed Lay Charity. Although the Church plays a much more important part in the administration of all kinds of charity, both public and private, than in Britain, a great amount is organised by laymen. Unfortunately this is seldom entirely independent of ecclesiastical or political influences, except in the large towns. When, therefore, we speak of organised lay charity we mean charity organised by laymen, but under the auspices of the Church or one or other of the political parties.

Before entering upon a detailed criticism of lay charities in Belgium, a few general remarks must be made upon the spirit underlying them.

The writer has had frequent occasion to admire the devotion and self-sacrifice of Belgian philanthropic workers, both Catholics and others. Probably, in proportion to its population, there is no country in the world so amply supplied with charitable agencies as Belgium. Almsgiving is an essential part of the religious obligation of Catholics, and so we find charities especially developed among them. But it lies in the nature of the case, and the writer hopes that his mention of the fact will not be regarded as a failure on his part to recognise the earnestness and consistency with which charity is practised by persons of all classes in Belgium, that the *sacrificial* aspect of almsgiving, the duty imposed on the individual to give a certain proportion of his wealth to the poor, is more generally observed than the *social* aspect. Among the Belgians the dangers of indiscriminate giving are even less appreciated than in England, for, being extremely sensitive to the sight of misery, they are more inclined to devote their energies to providing immediate relief than to removing the causes of distress. In consequence, much of the lay charity, whether administered by Catholics or undenominational, is less beneficial than it might be, in spite of the deep religious motives and great kindness of heart which so

often prompt it. Little effort is made either to ensure the adequacy of the relief in any particular case, or to avoid the destruction of the independent spirit of the poor. There is another point already touched upon, namely, the frequent mingling, in the donor's mind, of two motives, the unselfish desire to do good and the wish to attach the recipient of his bounty to his own church or political party. A great danger results from this tendency to combine the giving of charity with the effort to gain an adherent to the Church or to some political party—the danger lest the poor, under the stress of misfortune, should be persuaded to buy relief at the cost of sincerity. There is unfortunately considerable evidence that dissimulation of this kind is all too prevalent in Belgium.

By far the most important of the lay charitable institutions is the society of St. Vincent de Paul. This, which must not be confounded with the powerful sisterhood of the same name already mentioned, was founded three-quarters of a century ago in France. It has branches in many countries, and is very strong in Belgium. It is definitely connected with the Roman Catholic Church; indeed, to quote from the report of one of the branches, "it could not exist apart from the help of the priests." At the end of 1904 there were in Belgium 9 central councils of this society, 1014 different committees, 16,530 active members, and 22,681 honorary members. 27,242 poor families were visited by it, £42,756 was distributed among them, three-quarters of this sum being given in kind. The receipts of the society for the year amounted to nearly £50,000 (£49,439). Its great number of active members, almost all of whom undertake to visit poor families, suggests an organisation similar to that of an English City Guild of Help. But it is impossible to say how far the primary object of a Guild of Help is attained when the endeavour to abolish poverty is so inextricably mixed up with the desire to strengthen the Church, which is an equally important object of the society. To quote from a reference

to the society contained in a very interesting description of Catholic Charities in Bruges:¹

In the establishment of intimate relations between the visiting members and the families visited, the founder of the society had in view the spiritual good of all concerned. Material help was only to be looked upon as the occasion for that moral support which the visitor should give to the family visited.

Or again we read in a report of the work of the society in Liège:²

The society exists not only to render material aid to the poor, but also and especially to care for their moral and religious state.

These quotations describe a motive for charity which is at once a source of strength and of weakness. Moral and religious support is an admirable thing, but in the minds of many of the society's visitors it is to be feared that it merely signifies the process of attaching the family visited to the Catholic Church, without much consideration of the precise effect on character. In such cases, methods of help are liable to be adopted which are not only ineffective in removing the causes of poverty, but develop a spirit of dependence and hypocrisy rather than of initiative and self-respect.

No useful purpose would be served by any detailed description of the other lay charities of Belgium, none of which approach in importance the society of St. Vincent de Paul. Suffice it to say that there are very many, almost all of them, associated with the Church.

In a country like Belgium, where people, with few exceptions, belong either to the Catholic Church or to no Church at all, it is obvious that the desire on the part of those who are not Catholics to receive Catholic charity will result in a considerable amount of deception. Charity is practically unorganized, each society being independent of the others, and endeavours to organize it have hitherto failed in almost every case—failed, it appears, largely

¹ *Petit Guide de la charité catholique à Bruges*, 1897.

² *La Charité à Liège*, par Émile Laumont, 1897, p. 3.

because of this prevalent association of the relief of the poor with some other object. Still, a few charitable agencies are free from ecclesiastical and political bias, and their workers in different parts of the country are in touch with one another. Allusion may be made in this connection to the refuges and discharged prisoners' aid societies.

CONCLUSION

It now remains to draw our general conclusions regarding the various matters which have been discussed in this chapter.

The English reader, familiar with the history and administration of the poor law in his own country, may have looked for answers to questions such as these :

1. How does the mass of pauperism in Belgium compare with that in Great Britain, both as regards indoor and outdoor relief ?

2. What is the comparative cost of pauper relief in the two countries, again distinguishing between indoor and outdoor relief ?

3. How is the cost of pauperism met, *i.e.* what proportion by the State and what proportion locally ?

4. What is the character of the Poor Law Administration in Belgium ? With whom does it rest, and what control is exercised by the State ?

5. Is there more pauperism in the rural or in the town populations of Belgium ?

6. To what extent has relief in aid of wages tended to produce the same disastrous results in Belgium that it produced in England prior to the Reform of the Poor Law in 1834 ?

7. Is poor relief administered in such a way as to tend effectually to reduce the mass of pauperism ? *i.e.* is it reformatory or is it merely palliative ?

8. Is there much private charity, and is it wisely administered ?

We have seen that all these questions cannot be

answered with exactness, largely because of the difference between the methods of administering poor relief in Belgium and in England, but the information contained in this chapter enables us to give approximate replies. About 66 out of every 1000 persons in Belgium are receiving public relief of one kind or another (5 indoor, and 61 outdoor), or if vagrants and lunatics are excluded, 62 per thousand. This figure is probably below rather than above the actual facts. It is much higher than in the United Kingdom, where about 50 per thousand persons, exclusive of lunatics and vagrants, are relieved.

The cost of poor relief is much less per head of the total population in Belgium than in England, the respective figures being 2s. 8d. and 8s. Thus the English people spend three times as much per head of the total population over poor relief as the Belgians, and the cost per person relieved is also three times as much.

The explanation of the low cost of poor relief in Belgium probably lies in the following facts :

1. Practically all indoor relief is administered by the Church, on terms which are almost incredibly low.

2. The standard of comfort in Belgium is lower than in Britain. The grants made in the case of those receiving out-relief are often extremely small, only enough for the maintenance of life on a very low standard.

3. The cost of administration is low, largely owing to the low salaries paid to officials.

Turning to the ways in which the cost of poor relief is met, it has been shown that the State contributes about 14 per cent, the provinces about 5 per cent, and the communes about 26 per cent, the remainder (45 per cent) being met from endowments of various kinds.

The administration of ordinary poor relief rests almost entirely with the 2627 communes, practically without State interference or control,¹ but they in their turn pass

¹ The only union between different communes is that established by the "Common Fund" to which all of them contribute, but this cannot be used except for certain special kinds of relief, such as the education of deaf-mutes and blind persons, and the maintenance of lunatics. It cannot be used for

on to the Church almost the whole of the administration of indoor relief, although remaining responsible for its cost.

As regards the relative extent of pauperism in rural and urban districts, statistics do not allow us to speak with certainty, but a careful examination of such information as is available points to the fact that it is probably rather less in the former than in the latter. In Belgium the wealth of the local relieving body is the factor which chiefly determines the amount of relief given!

The differences which have always existed in the endowment for charitable purposes of the different communes have increased enormously with the lapse of time, owing for the most part to changes in land values. It must also be borne in mind that while in some communes the population has greatly decreased, in others it has not only grown, but multiplied. A further source of inequality is found in the fact that benevolent persons from time to time make gifts of land or money to the *Bureaux de Bienfaisance* and the *Commissions des Hospices*. These gifts, which are sometimes large, are naturally distributed not with a view to equalising the resources of the communes, but according to the local interests of the benefactors.¹ Consequently the funds available for poor relief vary greatly in relation to the population and the need for help.²

ordinary outdoor relief. Mention should here be made of a law passed in 1897 which enables two or more communes to combine for certain purposes connected with poor relief. This law has, however, remained practically inoperative.

¹ According to the Report of the Poor Law Commission of 1897-1900, the value of these gifts for the years 1888 to 1898 was as follows:—

£110,838 in 1889.	£126,362 in 1894.
86,214 in 1890.	147,069 in 1895.
106,415 in 1891.	104,249 in 1896.
92,335 in 1892.	105,311 in 1897.
97,515 in 1893.	176,280 in 1898.

From the *Annuaire statistique* for 1907 it appears that the gifts in recent years amounted to:—

£65,685 in 1900.
173,360 in 1905.
151,543 in 1906.

² The result of this inequality of resource has been shown to be disastrous in the case of the wealthy communes, where the proportion of the population

The granting of relief to supplement wages, in the case of parents with large families, must undoubtedly tend to keep wages low, though the smallness of the dole and the fact that it is not given in all parts of Belgium fortunately minimise the results of this tendency, so that no definite effect on the level of wages can be ascribed to it. Were the doles larger or the custom more widespread, the consequent lowering of the wage level would at once be noticeable.

In conclusion it must be said that the methods adopted for the relief of the poor in Belgium, whether in connection with public or private charity, are for the most part palliative rather than reformative. The number of really destitute persons to be met with in Belgian towns and villages is small, but this is due to their incarceration in the Labour Colonies, and to the fact that so many charities exist for their support, rather than to the removal of the causes of destitution. There is an almost complete lack of scientific effort to deal with the poverty problem at its sources. This is, no doubt, largely explained by the attitude of the Catholic Church, which takes so large a share in the distribution of relief, towards the whole question. This attitude cannot be better stated than in the following words of M. Aug. Bernaert : ¹

Some scoff at and condemn charity. They see in it only the supposed humiliation and degradation of the recipient. They are to be pitied. They do not understand the joy of charity. They

receiving charitable doles sometimes rises as high as 40 per cent, a fact which shows that the opinion expressed in the *Exposé de la situation du royaume, 1840-1850* (iii. p. 262), is still true. The writers of this report say :—

“In studying the relationship which exists in certain localities between the number of paupers and the amount available for poor relief, we notice that this number often increases as the means of assistance increase ; the more relief there is, the more paupers there are to be relieved. So much is this the case that if the amount of charity could be further increased there would always be fresh hands held out to receive it.”

It should be stated that the demoralising effect of ill-considered poor relief, both public and private, is much more widespread in the Flemish than in the Walloon provinces. There are not nearly so many private charities in the latter, and the *Bureaux de Bienfaisance* are not so rich.

¹ *Belgique charitable*, p. xxviii.

do not know that, as Ozanam has said, side by side with the public poor relief, which is sometimes humiliating, there is another which is ennobling because it gives with the bread which nourishes, the visit which consoles, and the instruction which enlightens. They do not know that it is better to give than to receive. Further, they do not know that for the Christian, charity is an obligation, that the poor are mediators for him, and that behind their rags is the majesty of Christ.

That this spirit is praiseworthy, none will deny; but that it may easily give to social effort a *sacrificial* rather than a *reformative* character is equally clear. It is the spirit underlying very much of the poor relief in Belgium, and that is why, especially in Flanders, relief has broken down the manly independence of the people. Such charity tends to perpetuate, if not eventually to aggravate, the poverty which it seeks to remove.

CHAPTER XXXI

UNEMPLOYMENT IN BELGIUM

WE have now taken a rapid glance at some of the various conditions of life in Belgium, its agriculture and industries, the standard of comfort of its people, and its methods of dealing with acute poverty. But no picture of the country would be accurate which did not give the most careful consideration possible to the question of unemployment. This is not, as is too often supposed, a merely personal disease, but most truly one of the whole State, and the fact that it is chronic is no excuse for ignoring its existence. It is necessary, therefore, to gauge the extent and severity of it in endeavouring to make an economic survey of the life of a nation, also to ascertain the particular nature of its effect on the community, and what measures have been taken to mitigate the evil. If unemployment be partly due to excessive population, the evil should certainly be found in Belgium in an aggravated form, for it is almost the most densely populated country in the world. If, on the other hand, crowded Belgium can show less of it than other countries, the causes of this must be ascertained.

The writer is aware how intractable a thing is unemployment. It is difficult to measure numerically, for it is all but impossible to draw the line between *under*-employment and *un*employment. For instance, in the sphere of casual labour, shall a man who has three days' work a week be called under-employed or unemployed? and how shall he be classified if, although unable to get work for wages, he spends his time in cultivating his garden or allotment?

Again, what of the man who is ill, but whose work is waiting for him when he is well enough to return to it? Difficulties such as these prevent scientific precision and accuracy of statement, and the absence of any complete figures renders the subject almost hopeless from the statistical point of view.

Not only are there no tables to show the number of those whose work is never other than casual, but, apart from those contained in the Belgian Industrial Census of 1896, there are no statistics of the number of *regular* workers temporarily unemployed, and thus the figures given in this chapter cannot be regarded as more than rough indications of the extent of the evil. Still, the facts revealed by them will throw some interesting light on measures adopted in Belgium which tend both to reduce the total mass of unemployment and to mitigate its bad effects.

As stated above, there is one official estimate of the amount of unemployment in Belgium. This is based on the industrial census made by the Government on October 31, 1896, which showed that 5.4 per cent of the industrial workers of Belgium were on that day unemployed.¹ This figure includes a number who were quite unemployable, owing to old age, illness, or other causes. The employees in public works, including municipal enterprises, the postal service, and the State railway,² did not appear in the census, although ex-employees in these spheres of work were reckoned as unemployed if not working elsewhere. We may, therefore, assume that in

¹ The census report does not state clearly what is included in the term "unemployed." Presumably, however, it is meant to include, in addition to all regular workers temporarily out of place, any casual workers who, through depression of trade or from other causes, had failed to secure that amount of work which they had come to look on as normal. Thus a docker would probably not return himself as "unemployed" just because no ship happened to be in at the moment the census was made, if he had reason to believe that he could continue to rely upon the dockyard as likely to be his source of income. And so with all casual-workers. But they would probably return themselves as unemployed if, from any cause, the sources on which they usually depended to provide them with casual labour sufficient for their maintenance had failed.

² On December 31, 1907, nearly 100,000 persons (95,135) were employed on the State railways (including boat service) and in the postal and telegraphic departments.

October 1896 the proportion of *bona fide* workmen who were unemployed (in the sense in which this term is popularly used) was not more than $4\frac{1}{2}$ per cent of the total, and possibly considerably less.

There are no statistics which indicate with certainty how far present conditions correspond with those of 1896. Up to the end of 1907 both industry and agriculture in Belgium were prosperous, and it may fairly be assumed that unemployment due to the state of trade has been less general during the last few years than when the census was taken.¹ This view is confirmed by an examination of the returns of unemployment which a few Trade Unions furnish. Unfortunately, these are very inadequate.

Trade Unionism is, however, exceptionally developed in Ghent, where no less than one-third of the workers are organised; and it will, therefore, be worth while to separate from the general Trade Union returns those which apply to that city, and to study them. They point to a marked decline in unemployment since 1896, when the industrial census was taken, for, whereas the percentage of workmen who were unemployed in Ghent was 3·9 in 1896, it averaged 3 per cent for the six years 1896 to 1901, and $2\frac{1}{2}$ per cent for the period 1902 to 1907.² Unfortunately, the national Trade Union statistics only go back as far as 1903, but during the years 1903 to 1907 the percentage of unemployed as shown in the national figures, excluding Ghent, corresponds closely with the Ghent figures, the average for the period being 2·7 for Belgium as a whole,

¹ No figures showing the effect of the industrial crisis of 1908 have yet been published (May 1909), but they will probably show a considerable rise in the percentage of unemployed, since certain industries have suffered severely. But as it is not likely that the proportionate increase of unemployment has been greater in Belgium than in Britain, the comparison to be made between the two countries later in the chapter will not be affected.

² 1896	3·9	1902	2·9
1897	3·2	1903	3·0
1898	3·5	1904	2·8
1899	2·6	1905	2·3
1900	2·4	1906	1·9
1901	2·6	1907	1·8

and 2·4 for Ghent.¹ It is fair to assume that there was a corresponding similarity in the period 1896 to 1903, and that the marked decline in unemployment which the Ghent figures reveal, represents a corresponding decline throughout the country. Thus, the percentage of men out of work, which was shown by the census to have been $4\frac{1}{2}$ per cent in 1896, has been considerably smaller since then.² If it has declined in the same ratio as the percentage of unemployed in Ghent, it will have averaged $3\frac{1}{2}$ per cent for the seven years 1896 to 1902, and $2\frac{3}{4}$ per cent from 1903 to 1907.

These are the only statistics upon which any estimate of the amount of unemployment in Belgium can be based. So far as they go, they appear to show that, taking an average of years, the percentage of unemployed workers in Belgium is somewhere about 3 per cent,³ but for reasons given on p. 503, this figure can only be taken as approximately correct.

In confirmation of the above estimate, the opinions of three Belgian authorities who have given special attention to the question may be quoted. M. Louis Varlez, of Ghent,

¹ Unemployment, of course, varies greatly from trade to trade, and unfortunately it has not been the same trades which have furnished statistics each year, so it would be misleading to compare the unemployment in the country as a whole with that in Ghent for any particular year; but by taking average figures over five years this source of error is considerably lessened. The percentages of unemployed among Trade Unionists for Belgium, excluding Ghent, were:

1903	.	.	4·1	|	1905	.	.	1·8
1904	.	.	3·5	|	1906	.	.	1·7
			1907	.	.	.	.	2·3.

The rise in 1907 is due to the beginning of a trade depression in the last two months of that year. This depression did not affect the textile industries which form so large a part of the organised trades in Ghent, and consequently does not find expression in the Ghent figures for that year.

² It will be remembered that the census returned the number as 5·4 per cent, but for reasons stated on p. 502 this cannot be taken as representing more than $4\frac{1}{2}$ per cent among *bona fide* workmen.

³ In considering the above estimate, it is important to notice that the Trade Union statistics have only been made use of as showing that there has been a decline in the amount of unemployment. The figure finally arrived at is based primarily upon the results of the 1896 Industrial Census, which covered all trades.

the author of several works on unemployment, who is better qualified than any one in Belgium to express an opinion, says, in a letter to the writer :

Of course, in Belgium, as in all countries, the amount of unemployment varies constantly, but I think we may look upon 3 per cent as roughly approximating to the proportion of *bona fide* unemployment in Belgium. By *bona fide* I mean unemployment among those able and willing to work, if work could be found for them.

M. Vandervelde, the well-known leader of the Belgian Labour Party, writes as follows :

In the absence of really accurate statistics, it is very difficult to estimate the proportion of unemployed in Belgium. It is certain, at any rate, that it is greater among the non-organised trades, and that consequently Mr. Rowntree will not be far from the truth when he speaks of 3 to 4 per cent of unemployed.

And lastly, M. De Leener, well known in Belgium as an economist, writes :

Although it is difficult to state with accuracy the proportion of unemployed among the Belgian workmen, I should be inclined, according to the information which is available on the subject, to adopt the figure of 3 per cent.¹

The fact that the amount of unemployment in Belgium is low is borne out by the opinion of Sir Cecil Hertslet, the British Consul-General for Belgium, who writes in his report published in 1908: "Belgium fortunately has not been seriously troubled with unemployment, notwithstanding the fact that this is the most thickly populated country of Europe."²

Though the Belgian statistics are meagre, we are even worse off when we come to Britain and attempt to compare one country with the other, since in Britain there are practically no statistics of unemployment on which to base a trustworthy estimate. All that is known is the percentage of unemployed members in certain Trade Unions which give unemployed benefits and furnish figures to the Board of

¹ The use of the word "unemployment" in the case of these three writers may be taken to coincide with that of the 1896 Industrial Census (see footnote, p. 502).

² Cd. 3727, p. 230 (1908).

Trade.¹ But these percentages cannot be looked upon as giving any trustworthy indication of the total amount of the evil; they refer only to a limited number of trades, and take no account whatever of unemployment among unskilled workmen, either casual or otherwise. All that can be given, therefore, is the general impression left on the minds of the writer and his helpers after studying social conditions in Belgium for three years, and taking counsel with all classes of persons, such as Trade Union secretaries, police officers, poor law officers, employers of labour, Catholic priests, and economists. This is that unemployment is somewhat less acute in Belgium than in Britain—an opinion which is confirmed by M. Varlez, who, in a letter already quoted, says:

Judging from statistics and literature on the subject, as well as from my personal observation, I have come to the distinct conclusion that in Belgium there is less unemployment than in England.

It is further confirmed by the fact that there is no general “unemployed agitation” such as has for the last few years made itself felt in Britain. The writer and his helpers, during the whole of their investigations in Belgium, did not hear of a single meeting or demonstration of the unemployed.

This comparative freedom in the smaller state may be partially traced to three factors, all tending to minimise the difficulty, none of which unfortunately are operative in the larger and wealthier country. One is the much larger proportion of persons engaged in agriculture, not in the capacity of labourers, but on their own account, as small cultivators. Although, of course, the pressure of their work varies greatly with the seasons, these large numbers of people are never unemployed in the ordinary sense of the word, *i.e.* they are never walking about seeking for some one to hire them. In Belgium 15 per cent of the population over twelve years of age are engaged in agriculture, as cultivators

¹ The percentages are as follows:

1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
3·15	2·4	2·85	3·8	4·6	5·3	6·5	5·4	4·1	4·2

Average for ten years, 4·2 per cent.

on their own account,¹ as compared with 5 per cent in Great Britain.

A second factor is the large "reservoir" of work available every winter in the forests. In Chapter XIII. it is shown that probably about 29,000 men are employed for about four months every winter in connection with the timber industry. Much of the work is of such a character that it can be performed by unskilled labourers, and is in fact done by men who in the summer are engaged in building and other seasonal trades, and by those engaged in agriculture during the rest of the year.

It may be urged that the afforestation of waste lands merely adds a new industry to those already in existence, and will not in the long run affect the unemployed problem. This objection, however, fails to give weight to the character of the work in the forests, which renders it especially valuable as a regulator of the labour market. It is quite different from a factory where the supply of goods is regulated by the demand, and where, on the one hand, enormous stocks cannot be accumulated, and, on the other, customers cannot, for long, be kept waiting. It is also unlike the ordinary demand for extra "hands" made at Christmas time by the Post Office. This varies in exact ratio to the pressure of additional correspondence, and the work cannot be put off even for an hour.

The processes of forestry are slow. If there are few unemployed men available, a large part of the work can wait for a season without much harm being done. If, on the other hand, there are many unemployed, the afforestation of waste lands can proceed more rapidly.

It seems clear that if the British Government were to afforest the 7,500,000 acres of land which are now lying waste or put to less profitable use,² a valuable contribution would be made towards the steadying of the labour market.³

¹ This number includes members of farmers' families who are working on the farm, but not agricultural labourers.

² See "Second Report on Afforestation," Cd. 4460, p. 32.

³ M. N. J. Crahay, Chief Inspector of the Administration of Woods and Forests in Belgium, believes that about three-quarters of the men employed

The last factor tending to reduce the volume of unemployment in Belgium, as compared with Britain, which need be mentioned, is the greater unification of the labour market, or, to put it in other words, the remarkable mobility of labour owing to the extraordinary cheapness of workmen's tickets on the railways.

The extraordinarily cheap rates at which workmen can travel in Belgium render labour much more mobile. If trade is depressed in any locality, it is easy for a man to go and work temporarily in another town, returning home each night, or, if the distance is too great for this, returning once a week.

The significance of this will be evident to all who recognise how largely the problem of unemployment, especially of partial unemployment, arises from the existence of a great number of separate and independent reserves of labour, which are necessary under existing conditions, but which could be largely dispensed with were the labour market more unified and better organised.¹

Let us now consider the effects of unemployment on those immediately affected by it and on the country in general. Not only, as we have seen, is the actual proportion

in winter in the forests belong to the agricultural classes, and one-quarter to the industrial classes, *i.e.* chiefly men engaged in the summer in building trades and in public works. In a letter to the present writer he says: "The group of industrial workers chiefly comprises workers in the trades which are forced to stop during winter, such as masons, plasterers, tilers, and out-door labourers. This is the case especially in our densely populated industrial provinces—Brabant, Hainaut, and the environs of Liège and Namur. I know well a large forest some twenty-two miles (35 km.) from Brussels, between that town and Charleroi, which in summer affords scarcely any employment. But from October to March hundreds of men are busy in the felling of timber, in planting, etc. These workers are masons, plasterers, tilers, etc., who during the summer work in Brussels and in the valley of Charleroi. There are also workers from the metal industries, but they are the exception, because these industries are fully employed in winter, and the men engaged in them are not such good forest workers. In the Ardennes, Flanders, and the Campine, on the other hand, the forest work is chiefly recruited from agricultural labourers. But here, as in the other parts of the country, there is a mixture of agricultural and industrial labour. The carting is chiefly done by farmers and small holders, who in this way make use of their horses when there is no employment for them in the fields."

¹ This view is developed in detail in Mr. Beveridge's book, *Unemployment, a Problem of Industry* (Longmans, 1909).

of unemployment in Belgium probably somewhat less than in England, but its evil effects are mitigated by certain factors which must now be studied.

The first of these is the great thriftiness of the Belgian people, especially in the Flemish provinces—a fact brought out in Chapter XXIX. Not only are there large sums in the Savings Banks, but the Belgian workmen freely adopt other means of saving, such as Friendly and Co-operative Societies; while, thanks largely to the Housing Act of 1889, a great many of them own the houses they live in.¹ Such ownership constitutes a very substantial insurance against all forms of financial risk, including unemployment.

Probably, however, the most important of the factors which lessen the suffering due to unemployment is the economic stability given to a large number of working men by the fact that they are enabled to live in the country, although working in the towns—a result of the cheapness of railway tickets. These men usually cultivate a plot of land, and, if they are seasonal workers, rely upon the period of unemployment for doing the heavy work, such as digging and manuring, leaving it to their wives or other members of the family to attend to the crops when they are engaged elsewhere. Not only are they able to afford a much larger house in the country than in the town, but during periods of unemployment the family can live upon the potatoes, vegetables, bacon, or other produce which they have raised. For such men unemployment is not synonymous with abject poverty, as is so often the case in England. It is said that many a bricklayer, docker, and other seasonal worker who lives in the country does not trouble to look for work when it is very scarce, but leaves what little there is to his brother workmen in the towns.

In the matter of systematic effort to deal with the unemployed problem, Belgium has little to teach us. She has not—as Germany has—a highly organised system of Labour Bureaux. Two-thirds of her *Bourses du Travail* are unofficial and primarily charitable in character, although often

¹ See Chapter XXVIII.

financially aided by public bodies. Without wishing at all to minimise the good which they are doing, it cannot be said that as yet they play an important part in dealing with the problem of unemployment. In 1908 they were instrumental in finding work, usually unskilled in character and often of a temporary nature, in 15,490 cases.¹ But the skilled and many of the best unskilled workmen have long refused to make use of the *Bourses du Travail*, just as they refuse to use the Labour Bureaux of the Distress Committees in England. An effort is, however, now being made, notably in Antwerp and Ghent, to develop a better type of Labour Bureau, somewhat on the German model, and this is being supported by the Trade Unions.

Relief works for the unemployed are only provided on a very small scale. The workshops—*ateliers de chômage*—in which a few of the Trade Unions seek to provide their unemployed members with work at their own trade, are, however, an interesting experiment. They are purely local and sectional in character. One of the largest is that of the cigar-makers of Ghent, established some twenty years ago, and employing at times as many as thirty workers.

The well-known Labour Colonies at Merxplas and elsewhere are not really efforts to deal with the problem of unemployment. They are semi-penal in character, and are intended rather for the criminal and unemployable classes than for respectable workmen who, through no fault of their own, are temporarily out of work.

There is, however, one experiment which the Belgians have made where the results are of unquestionable value. In 1900 the municipality of Ghent decided to subsidise any efforts made by the workmen themselves, either individually or through Trade Unions, to insure against unemployment. The amount of this municipal relief might never exceed that derived from the workmen's own insurance, and no one might receive it for more than sixty days in any year. The results of this experiment have

¹ This does not mean that places were found for 15,490 separate individuals. Often short temporary jobs would be found, on several occasions during one year, for the same person.

been very satisfactory. It was found that this offer of supplementary relief, bearing a definite ratio to the amount subscribed by the men, greatly stimulated the efforts of trade unionists and others to insure against unemployment. The example of Ghent has been followed by all the important industrial communes in Belgium, and grants are also being made by six out of the nine provinces and by the central Government.¹

Though, as yet, only a small proportion of the total number of workers benefits by this movement, the figures show that its development has already been considerable. It is too soon to speak with any certainty, but it seems probable that the Belgians have provided a useful object lesson for other countries. Already the Governments of France, Norway, and Denmark have voted money for the encouragement of personal efforts in the direction of insurance against unemployment, while local authorities are copying the Ghent experiment in France, Holland, Germany, and Norway.²

¹ Some idea of the extent to which this movement has developed may be gathered from the following table:—

Year.	Number of Public Bodies Granting Subsidies.	Amount Paid.	Number of Affiliated Trade Societies.	Number of their Members.	Relief Paid (from all Sources).	Percentage of Relief Paid from Public Funds.
		£			£	
1900	1	60	3	289	49	...
1901	2	460	26	13,285	966	26
1902	8	1,660	98	15,740	3,778	30
1903	14	2,326	129	21,349	4,278	37
1904	15	2,432	128	22,554	5,243	38
1905	18	2,791	131	30,000	5,445	51
1906	25	3,359	229	?	6,948	48
1907	27	4,054	284	?	10,453	39
1908	32	6,238	346	?	18,468	33

² In Great Britain a scheme of unemployed insurance is under the consideration of the Government at the time of writing (May 1909). The proposal is that it should be compulsory, with contributions by workmen, employers, and the State, and that it should apply in the first instance only to a few selected industries, namely, building, engineering, machine- and tool-making, ship- and boat-building, and the construction of vehicles (comprising a total of about two-and-a-quarter million men).

CHAPTER XXXII

VITAL STATISTICS

OUR enquiry into the social and economic conditions of Belgium may fitly conclude with an examination of her vital statistics, since these are really the rough index of a nation's life. This is especially true of the death-rate, for a high mortality is almost invariably associated with a low stage of development, with ignorance, poverty, and squalor; while a low one, other things being equal, is a sign of advanced civilisation and comparative social well-being. It is important to remember that from the death-rate we not merely tell the number of the dead, but infer the health conditions of the living. Other vital statistics, of course, are symptomatic in greater or less degree. An increasing population, for instance, is usually a sign of national vigour, and its relative density affects the social problem at many points. The figures of emigration and immigration show how far residence in a country is considered desirable.

POPULATION

The population of Belgium at the date of the last census in 1900 was almost seven millions, and it now slightly exceeds that figure. It has increased by about 50 per cent since 1846. Immigration has played practically no part in the increase, the excess of immigrants over emigrants never being more than a few thousands per annum.¹

¹ MEAN ANNUAL EXCESS OF IMMIGRATION OVER EMIGRATION

1861-70.	1871-80.	1881-90.	1890-1900.
400	4027	1509	3363

The fact, frequently referred to in this volume, that Belgium is the most densely populated country in Europe, does not imply that there are not other European districts as large and as densely populated. For instance, England, if separated from Wales, has an even denser population, namely, 606 as compared with 589, but to separate Wales from England is equivalent to separating the Ardennes from the rest of Belgium.¹ If we may accept the figures given by Dr. Conrad,² Belgium appears for at least two hundred years to have occupied either the first or second place among the countries of Europe as regards density of population.

THE DEATH-RATE

In order to get valuable information out of the death-rate figures, the average for a number of years must be taken and compared with that of other countries. The latest available international figures cover the decennium

¹ TABLE OF THE DENSITY OF POPULATION IN DIFFERENT EUROPEAN COUNTRIES

	Year of Census.	No. of Persons per Square Mile.
Belgium	1900	589 ^(a)
The Netherlands	1899	406 ^(a)
United Kingdom	1901	342 ^(a)
<i>England and Wales</i>	1901	558 ^(b)
<i>Scotland</i>	1901	150 ^(b)
<i>Great Britain</i>	1901	420 ^(b)
Italy	1901	293 ^(a)
Germany	1900	270 ^(c)
Austria	1900	226 ^(a)
Switzerland	1900	214 ^(a)
France	1901	191 ^(a)
Denmark	1901	165 ^(a)
Hungary	1900	154 ^(a)

^(a) Statistical Abstract for the Principal and other Foreign Countries, Cd. 3136.

^(b) Statistical Abstract for the United Kingdom, Cd. 3691.

^(c) *Statistisches Jahrbuch für das deutsche Reich*, 1905.

² *Grundriss zum Studium der politischen Ökonomie*, 1902, vol. iv. p. 70.

1895-1904, and the following table shows the place which Belgium occupies among the European countries.

TABLE OF DEATH-RATES PER THOUSAND OF POPULATION IN VARIOUS EUROPEAN COUNTRIES—AVERAGE FOR 1895-1904¹

Norway	15·1
Sweden	15·8
Denmark	15·8
The Netherlands	17·0
England and Wales	17·2
BELGIUM	17·7
Scotland	17·8
Ireland	18·0
Switzerland	18·1
France	20·4
Germany	20·8
Italy	22·7
Austria	25·2
Hungary	27·3

Bearing in mind that Belgium is a densely populated industrial country, it will be admitted that she takes a creditable place among other nations. The rate of mortality has been steadily declining ever since statistics have been published. Thus, for the decennial period 1865-1874 it was 23·8, and for the succeeding two decades 21·4 and 20·2 respectively, as compared with 17·7 for the decade 1895-1904. Since then it has fallen to a still lower figure, namely, 15·8 in 1907.

If the death-rate for the whole country be analysed, interesting facts emerge. The broadest division is naturally that separating urban from rural districts. The difference between the death-rates in these is not so marked as might have been expected, being 18·9 in communes with a popu-

¹ *Sixty-eighth Annual Report of the Registrar-General for England and Wales*, pp. 92-93. The figures given in this table are *crude* figures, that is, they have not been corrected for age and sex distribution. This cannot be done with international statistics, as only some of the nations supply the necessary information. Crude figures are always unsatisfactory, and can only be accepted as roughly accurate. For a full discussion of the fallacies involved by too close comparison of crude death-rates, see supplement to the *Sixty-fifth Annual Report of the Registrar of Births, Deaths, and Marriages, in England and Wales*, part i. p. xlv.

lation of ten thousand or over, as compared with 17·6 in those in which it is less than ten thousand.¹ The smallness of the difference is partly explained by two facts. First, some of the communes with more than ten thousand population contain considerable areas which are really rural in character, and secondly, owing, as we have seen, to the extraordinary railway facilities, a great number of persons live in rural districts who are engaged during the day-time in towns. Thus the division between large and small communes can only be taken as a rough division between urban and rural districts.² To ascertain exactly how far density of population and a high death-rate coincide, we must compare different areas in the same town. That the large towns in Belgium have not an excessively high death-rate proves little unless we can add that the death-rate is not excessive in any part of those towns; but here statistics fail us. A town where certain areas have abnormally high mortality rates might conceivably have a low rate on the whole, through the mingling of extreme conditions within it. The fact that in Belgium so many men live in the country, away from their work, does not mean that their work may not kill them; but they will die in the country, further confusing the present issue. The figures for the Flemish and Walloon towns respectively have perhaps an especial bearing on the subject of our enquiry; the death-rate in the former being markedly higher than in the latter, as is shown by their respective averages of 19·7 and 16·7. (Average for the years 1899-1901.) Again, if the matter be tested by taking the ten highest and the ten lowest rates in the whole country, all the former will be found in Flemish, and all the latter in the Walloon districts. This is largely a question of poverty, seeing that

¹ These figures refer to the three years 1899-1901. These years have been chosen for examination because the census was taken in 1900, and the figures of population may therefore be looked upon as practically accurate. For these three years the death-rate in the country taken as a whole was 18·1.

² It must also be borne in mind that once again we are dealing with crude figures. Had corrections been made for age and sex distribution, the result would have been to magnify the difference between the rates of mortality in town and country.

wages, and consequently the standard of comfort, are much lower in the Flemish than in the Walloon towns. In the following table the death-rates in a number of Flemish and Walloon towns selected as having approximately the same population are compared. The figures refer to the years 1899-1901.

Flemish Towns.	Population.	Death-Rate.	Walloon Towns.	Population.	Death-Rate.
Antwerp . .	275,091	19·7	...	...	...
Brussels . .	185,798	20·5	...	...	...
Ghent . .	162,033	21·7	Liège . . .	158,881	18·0
Bruges . .	54,621	21·3	Verviers . .	48,563	15·8
Louvain . .	43,012	19·1	Seraing . . .	38,209	18·0
Courtrai . .	33,644	21·7	Namur . . .	32,198	19·6
St. Nicolas . .	31,706	24·3	Mons . . .	28,012	17·5
Roulers . .	23,158	27·4	Charleroi . .	25,006	15·2
Tirlemont . .	17,671	15·4	La Louvière . .	17,621	14·3
Iseghem . .	12,066	25·8	Jemappes . .	12,698	17·7
Thielt . .	10,486	24·4	Ath . . .	10,728	16·3

It will be noted that the death-rate of Ghent (21·7 per thousand) is higher than that of Brussels, Antwerp, or Liège. This is probably due to the large number of married women engaged in the textile industry, and the fact affords another argument against the employment of married women in factories.¹

The death-rates in England and Wales during the five years 1898-1902 were:

London and 10 predominantly urban counties . .	19·2
" 16 " rural " 	14·3
Whole of England and Wales	17·4

More delicate as a test of social conditions than the above crude death-rate figures are those showing the

¹ No statistics are given to show the causes of the deaths in Belgium. They are published in the *Annuaire statistique* for each year, but owing to the fact that notification of the causes of deaths is not compulsory, and is therefore carried out very incompletely, they must be accepted with caution. Another reason for distrusting them is the fact that secondary diseases are often returned instead of primary ones.

infantile mortality, that is, the number of children per thousand who die under twelve months of age. Here more accurate comparisons are possible, for there are not the same disturbing elements of age and sex distribution as in the case of the general population.¹ From this standpoint the position which Belgium occupies among the nations of Europe is less desirable. This is shown in the following table, which gives the average mortality per thousand of children under twelve months of age for the years 1900-1904. For purposes of comparison, corresponding figures for two decades 1883-1902 are also given:—

INFANTILE MORTALITY ²

	1883-1892.	1898-1902.	1900-1904.
Norway	97	94	83
Sweden	108	99	99 ³
Ireland	96	104	101
Denmark	136	133	121
Scotland	120	127	122
Switzerland	161	145	138
Netherlands	177	152	141
France	168	158	144
England and Wales	144	152	143
BELGIUM	162	157	153
Italy . . . . .	...	173	168
Prussia	208	199	193
Austria . . . . .	...	...	220 ⁴

The fact that the infantile mortality in Belgium is higher than that of any other country dealt with in this

¹ It must, however, be noted that even here an absolutely accurate comparison cannot be made, because the rules observed with regard to the definition of a still-birth are different in different countries. For instance, "in Holland, Belgium, and France a child is registered as a live-birth only if alive at the time of registration, which may be three days after birth. In most countries, however, it is registered as a live-birth if it has given any sign whatever of life" (see the paper read by Augustus D. Webb, B.Sc., before the Royal Statistical Society, 14th December 1909). The comparison of Belgium with the other countries is less favourable, therefore, than would appear from the figures given.

² *Sixty-eighth Annual Report of the Registrar-General*, p. 95 et seq.

³ Average 1899-1903.

⁴ Average 1898-1902.

table, with the exceptions of Prussia, Italy, and Austria, points to unsatisfactory hygienic conditions, due either to ignorance on the part of the parents, or to poverty or unhealthy housing.

Let us analyse the Belgian figures, and see if any light can be thrown upon the cause of this high infantile mortality.¹ Taking again the average of the three years 1899-1901, we find that, in communes having a population of over ten thousand, 181 infants in every thousand died in their first year, as compared with 148 in communes with less than ten thousand, the average for the country being 161. Here too, as in the case of general mortality, the death-rate in the Flemish is markedly higher than in the Walloon towns, the average being 198·5 and 133·9 respectively. In some Flemish towns the mortality is truly appalling. For instance, in Roulers, practically one-third (31·2 per cent) of the children born die before they reach the age of twelve months. In Ostend the figure is nearly as high (29 per cent), and in St. Nicolas more than a quarter (27·7 per cent) of the children born die in their first year. There are no figures approaching these in the Walloon towns, where the highest is Jemeppe (18·1), and then come Jumet (16·3), and Dampremy (15·9). We see the consequences of a low standard of living in the Flemish towns, where the ill-nourished mothers cannot rear their children. The great

¹ PERCENTAGE OF THE DEATHS OF INFANTS OCCURRING AT DIFFERENT AGES CALCULATED ON THE TOTAL NUMBER OF DEATHS UNDER TWELVE MONTHS.

Ages.	1876-80.	1881-85.	1886-90.	1891-95.	1896-01.	1901-06.
Under 1 month . . .	29	28	26	27	26	26
From 1-2 months . . .	12	12	13	12	13	13
„ 2-3 „ . . .	11	11	11	11	11	11
„ 3-6 „ . . .	21	22	22	22	23	23
„ 6-12 „ . . .	27	27	28	28	27	27
	100	100	100	100	100	100

From this table it will be seen that one-quarter of the deaths occur in the first month of life and another quarter in the second and third months.

prevalence of industrial labour among married women in Flanders is no doubt partly accountable for the high infantile mortality, but this too is only a question of poverty, the wages of the men being so low that the women are obliged to go out to work. The mortality of infants in the country is less than in the towns,—namely, 150 per thousand, as compared with 180, and again much less in the Walloon than in the Flemish districts.

The same facts are disclosed if, instead of considering the general and infantile death-rate, we take that of children from one to five years of age per thousand living at that age. Here the average mortality for the country as a whole for the three years 1899-1901 was 18. It was much higher in the communes of more than ten thousand population than in the rest of the country, viz. 23 as compared with 16, and also much higher in the Flemish than in the Walloon towns. For instance, in the town of Hamme, the mortality was 44, in Malines 37, in Koekelberg 34, in Molenbeek St. Jean 31, in Mouscron 31, in Brussels 31, in Alost 30, and in Ostend 30. On the other hand, the highest mortality in Walloon towns was to be found in Seraing 28, Jemeppe 27, and Liège 25. The average mortality in the Flemish towns having a population of over 10,000 was 25, as compared with 19 for the Walloon towns. Those familiar with vital statistics consider the mortality of children from one to five years of age an especially delicate test of health conditions. The stage of early infancy, with its special dangers, is passed, that of differentiation of occupation has not begun. Children of this age are especially susceptible to the conditions of their environment, to good food, adequate clothing and satisfactory housing, or to the reverse. The figures just cited show clearly how great is the need for improvement, especially in the Flemish towns; and they show also how impossible it is for these underpaid Flemish working people to give their children a fair chance. It is encouraging to find that the rate of mortality among children between one and five years of age is steadily decreasing.

The Birth-Rate

We now turn to the question of the birth-rate, and find that in common with that of many European countries it is falling rapidly. From 1830 to 1884 the crude birth-rate, estimated per thousand of the population, never fell below 30, except at the time of the famine in Flanders (1846-1856). Between 1885 and 1902 it was always between 28 and 30, but since 1902 it has dropped rapidly and regularly, and stood at 25·3 in 1907. The following table gives the figures for most of the European countries:—

BIRTHS PER THOUSAND OF THE POPULATION
AVERAGE FOR THE FIVE YEARS 1901-1905

Hungary	37·2
Austria	36·1 ¹
Spain	35·3
Prussia	34·9
Germany	34·7 ¹
Italy	32·5
The Netherlands	31·6
Scotland	29·0
Denmark	28·9
Norway	28·6
Switzerland	28·1
England and Wales	28·1
United Kingdom	27·7
BELGIUM	27·7
Sweden	26·1
Ireland	23·2
France	21·3

This shows the birth-rate in Belgium for the five years ending 1905 to be exactly the same as that of the United Kingdom, and below that of all the other countries for which particulars are given in the table, except Sweden, Ireland, and France.²

¹ Average for the four years 1901-1904.

² The above table refers to the crude birth-rate, which is that almost invariably cited. But Drs. Newsholme and Stevenson, in a paper on "The Decline of Human Fertility" published in the *Journal of the Royal Statistical Society* (March 31, 1906), show how far such crude figures are from accurately representing the *fertility* rates. The following table gives for the year

The birth-rate per thousand of population is higher in the Flemish than in the Walloon towns (29·9 as compared with 24·8),¹ and over the whole of Belgium it is a little higher in the country districts than in the towns (29·6 as compared with 28·3).² The higher birth-rate in Flanders as compared with the Walloon districts is largely due to the greater hold of the Catholic religion, which strongly opposes the artificial restriction of families. Among both the Flemish and the Walloon people, however, there is an increasing tendency towards this policy, which is openly advocated by some of the Socialist leaders, who have circulated pamphlets on the subject.

1901 the crude birth-rate (legitimate only), and the legitimate birth-rate corrected for variations in age and sex constitution, and for the proportion of married women of child-bearing age in the population. It will be noted that Belgium's birth-rate is the lowest but two among the countries cited, only France and England and Wales coming below.

	Crude Birth-Rate.	Corrected Birth-Rate.
Norway	27·05	35·6
Ireland	22·48	35·6
Sweden	23·37	32·9
Austria	31·7	32·8 (1900)
Prussia	32·0	32·7 (1903)
Germany	31·07	32·0 (1903)
Scotland	27·86	31·7
Italy	31·39	31·2 (1902)
Denmark	25·77	29·9
BELGIUM	26·62	28·9 (1902)
England and Wales	27·29	27·3
France	19·8	19·3

¹ For the purpose of this calculation, Brabant has been taken as being Flemish.

² If instead of stating the birth-rate per thousand of the population, it is confined to the legitimate births and stated per thousand married women, the average figures for the years 1899-1901 come out as under:—

Flemish districts (town and country)	267
Walloon " " " "	161

In the communes of more than 10,000 inhabitants the average birth-rate per 1000 married women is much lower, namely 142, as against 200 for the whole country. The figures in certain Flemish communes are much above the average, *e.g.* Hamme, 268; Tamise, 263; and Roulers, 255. The highest figures for Walloon towns are much lower, *e.g.* Ougrée, 163; Jemeppe, 154; and Châtelaineau, 153.

That the reduction in the birth-rate has been due to this cause rather than to a diminishing marriage-rate is clear, for the latter increased from 14·3 persons married per thousand of the population in 1875 to 17·2 in 1900.¹ At the same time the average age at marriage has decreased, and therefore the length of the child-bearing period is greater.²

Summarizing the information given in this chapter, we see that, so far as can be judged by the crude general death-rate, health conditions in Belgium are not unfavourable in comparison with other European countries. But her high infantile mortality—a more delicate test of health conditions than the general death-rate—points to the presence of evils—poverty, ignorance, insanitation, or all three—worse than those existing in most other countries of Western Europe. All these figures show a much better state of things in the Walloon than in the Flemish provinces.

The statistics of emigration and immigration show that the people who wish to go and live in Belgium are more numerous than those who wish to leave it, generally a healthy symptom!

The birth-rate is low in comparison with that of other countries, largely on account of the low figure in the Walloon provinces; but the fact that it is falling does not call for special comment, as a diminishing birth-rate is common to all the countries of Western Europe.

¹ Since 1900 the marriage-rate has slightly dropped, and now stands at 16·04. There has been a decrease in the illegitimate birth-rate; in 1907 this was 65 per thousand total births, compared with 84 for the decade 1891 to 1900. In 1903 the corresponding figure for Germany was 83, in 1905 that for France 81, and for England and Wales 40·2.

The average number of births per thousand unmarried women aged eighteen to fifty-five was:—

In 1891-1895	. . . . .	18
„ 1896-1900	. . . . .	17
„ 1899-1901	. . . . .	15

² Number of persons per thousand married who were under twenty-five when married:—

	1886-1890.	1896-1900.
Men	304	367
Women	502	540

PART VI
CONCLUSIONS

CHAPTER XXXIII

CONCLUSIONS

It now remains to draw our general conclusions from the facts which have been set forth in this volume. So much ground has been covered, and the subjects discussed have been so various, that it will be necessary briefly to summarise some of the principal matters dealt with.

(1) Belgium is a small, densely populated country, rich in coal, metals, and building-stone. Its port of Antwerp is one of the most important in the world. In spite of the density of population the emigration-rate is very low.

(2) The land is much divided. One in every ten of the population owns at least a plot, but there are practically no large landed proprietors in the British sense of the word. 47 per cent of the soil is held by persons whose holdings do not exceed 100 acres. This great subdivision is not the outcome of any revolutionary redistribution of the land, but of a gradual movement, greatly furthered by the law of succession introduced at the time of the French Revolution. This has operated steadily against the creation or maintenance of large landed estates, and it has operated in a country with a dense and growing population keenly desirous of land. In Belgium, as in many other continental countries, it compels the equal division of all property among the legal heirs, subject to certain exceptions which in practice are unimportant. Entail is forbidden, and settlements are confined within very narrow limits.

(3) The great subdivision of land has facilitated the establishment and maintenance upon the soil of a large

number of small holders. The agricultural population per square mile of the cultivated area is over three times that of Great Britain, while the average size of farm in Belgium is $14\frac{1}{2}$ acres as compared with 63 acres in Great Britain.¹ 65 per cent of the agricultural population consists of farmers and members of their families working with them, only 35 per cent being labourers. In Great Britain these figures are reversed, 30 per cent being farmers and members of their families working with them, and 70 per cent labourers.

(4) The yield obtained per acre from the cultivated area of Belgium is very high—higher than in any other country in Europe, in spite of the fact that much of the soil is intrinsically of poor quality. Several factors contribute to this result. Not only have the people an aptitude for agriculture, but the increasing subdivision of the soil has forced them to cultivate more and more intensively, and to utilise every inch of space. Moreover, they have been aided by an excellent system of agricultural education, leading to improved methods, and the use of more chemical manure per acre than any other country in the world. Agriculture has also received much encouragement from the Government, and co-operation has helped greatly in many ways.

(5) The price and rent of agricultural land in Belgium are about twice as high as in England.

(6) Belgium has a well-organised State Forestry Department and is rapidly afforesting all her waste lands. 18 per cent of her territory is covered with woods—a proportion more than four times as high as in Great Britain. A satisfactory return is obtained on the capital invested.

(7) In comparison with her size, Belgium has the most extensive system of main and light railways and canals in the world. Almost all her main railways are national property, and she is financing her light railways so cleverly that they will become public property at the end of a

¹ Holdings under 1 acre are not included in this calculation.

certain number of years, without any appreciable cost to the public purse. She has frankly recognised that light railways cannot do more than just pay their way, and will never show so high a return upon capital as to induce capitalists to choose them in preference to other industrial investments. If economically managed, however, they can be run practically without loss, and they are of inestimable value in opening up country districts and developing agriculture. Indeed, it may be said that small holdings cannot be made fully successful without such means of cheap and rapid transport as light railways afford. Canals, which are almost all national property in Belgium, are looked upon as high roads, and the State is satisfied if the very low charges made for their use cover, or almost cover, the cost of upkeep. The very low rates charged for the transport of goods both on railways and canals¹ are a great benefit to industry as well as agriculture, and the extraordinary cheapness of the workmen's tickets upon the railways has economic effects of a far-reaching character—among others it facilitates decentralisation of population and industries, and thus largely destroys the monopoly of landowners in towns.

(8) In the matter of the housing of the working classes Belgium has useful lessons to teach. Owing partly to the very low cost of building and partly to the greater diffusion of the population, house rents are very low, not much more than half those in Great Britain. Workmen wishing to build their own houses can obtain virtually all the necessary capital on specially favourable terms.

(9) Belgium is an industrial centre of extraordinary activity. She manufactures a great variety of goods, but the wages of her workers are very low; for instance, in the building and engineering trades they are only about one-half of those paid in England. Typical working-class budgets show that while the best-paid skilled workmen are properly fed, the wages of many skilled workmen and of unskilled labour are inadequate to maintain a family of

¹ The boats on the canals belong to private owners, not to the State.

moderate size in a state of physical efficiency. There is little doubt that the proportion of workmen who are adequately fed is much smaller than in Britain.

(10) The standard of elementary education is low. 20 per cent of the population over twelve years of age can neither read nor write. Education is not compulsory.

(11) The consumption of alcohol is large, its sale being almost unregulated. Practically any one may sell it, and the number doing so is almost incredible. It is probable that more than one-sixth of the income of the working classes is spent in drink.

(12) Poor relief is badly organised. Each of the 2627 communes controls its own relief, and the amount it administers depends on the funds available. Many communes, through legacies and from other causes, have large sums at their disposal, whose disbursement leads to the pauperisation of the community. Political and denominational influences play an important part in the distribution of relief, and it is often given to supplement low wages.

(13) The burden of taxation per head of the population is not heavy, but many of the taxes are of a character tending to check enterprise.

(14) There is probably less unemployment in Belgium than in Britain.

Such in brief outline are the main results of the investigation made by the writer into social and economic conditions in Belgium. Let us now review them and see whether they throw any light on the causes of poverty and the steps to be taken for its removal.

THE INDUSTRIAL POPULATION

Taking first the industrial population, we find a great variety of industries. Textiles, iron and steel, coal-mining and the building trades all occupy a large number of workers, and almost every other industry is represented to a greater or less extent. But the actual lot of the operative is not one to be envied. Certainly, the cost of

living is rather less in Belgium than in some other European countries. But the wages per hour are so low that in spite of this, and in spite of the excessive length of the working day, the average man cannot earn enough to maintain himself in adequate health and comfort.

The immediate causes of these low wages are three in number, namely :—

(1) The productivity of the workers is somewhat low.

(2) A comparatively small proportion of them are engaged in the manufacture of goods of the highest quality.

(3) Wages are largely fixed by individual bargaining between employer and employed, and the workers generally are not strenuous in demanding the full economic value of their labour. The weakness of the Trade Union pressure on the capitalists, results in the organisation and equipment of the factories being somewhat inefficient.¹

These facts all indicate that industrial life in Belgium is, so to speak, at a low potential. The willingness of the workers to accept a low standard of living leaves them, as a class, at the mercy of whatever economic forces may be brought to bear upon them. Let us see what these forces are. They will either come under the general heading of land or capital.² So far as land is concerned, we have seen that the monopoly of the landlord which gives him his economic power is largely destroyed in the Belgian towns, firstly, by the great subdivision of property, and, secondly and especially, by the very complete arrangements which exist for the cheap conveyance of goods and passengers. These have led to a decentralisation of both industry and population and have prevented excessive land values in towns. It cannot, therefore, be said that Belgian town

¹ These causes of low wages are discussed in Chapter VI., where it is shown that if the Trade Union movement were stronger, the pressure which the men would be able to exert on the employers would oblige them to give higher wages. This would not ultimately mean a reduction in the profits of the employing class or an increased cost of production, but it would lead to better organisation and the introduction of improved machinery.

² The term "capital" is here used in its broadest sense to imply all economic forces in the industrial system except those exercised by the landlord and the wage-earner, including among wage-earners artisans working on their own account.

landlords claim an exceptionally large share of the industrial wealth produced; probably indeed they claim a smaller share than in Britain. In this connection it is interesting to note that although only 23 per cent of the occupied persons in Belgium are engaged in agriculture, 56 per cent of the whole population live in rural and only 44 per cent in urban communes.

On the whole it may be said that the pressure which weighs upon the industrial population is not primarily that of the landlord, and must therefore be the pressure of the industrial system.¹ Why is this so severe? Belgium entered the modern field rather late, and she found that other countries, notably Britain, had already captured the most profitable markets. It would have been a slow and difficult process to win for her goods a reputation for quality equal to that of her principal competitors, but it was immediately possible for her to obtain a large custom for them in the markets of the world if she were prepared to sell them cheaply enough; and this has been the policy adopted. Her trade depends on offering goods at cheap rates, and the competition is not only international, but very keen between one Belgian manufacturer and another. In order that he may make the minimum profit which will satisfy him, the employer must keep down the cost of production to the lowest possible point. If he were confronted with workmen whose demands were higher and who, through effective combination, were able to enforce them, he would be driven to achieve this result by thoroughly efficient equipment and organisation of his factory. But as he finds ready to his hand a large supply of badly organised labour willing to work very long hours for exceedingly low wages, he naturally takes the line of least resistance, and makes use of this instead of striving after improved methods and investing in labour-saving machinery.²

¹ To a certain extent the low wages are due, as stated on page 82, to low productivity, but this only very partially accounts for them.

² A few factories in Belgium, including some under German management, are exceptionally well equipped and organised. These reap a double advantage—both that arising from good organisation and that resulting from cheap labour.

We must now ask what forces must be brought into play if the condition of the industrial workers is to be materially improved. We have seen that wages in Britain at the present time are very much higher than in Belgium, but if we go back about seventy years we find that they were about the same as those now paid in Belgium, and it will therefore help us in our quest to find out what has led to the increase in Britain.¹

Between 1833 and 1837 the Joiners' Union in Glasgow was fighting hard to get a standard wage of 21s. per week. Now their wage is over forty shillings. Wages of stonemasons in Glasgow have risen from 5d. an hour in 1853 to 9d. in 1906, while those of enginemen at a small colliery in the Lothian, which were 11s. a week in 1831, are now three times as much. The wages of compositors in Edinburgh have risen from 21s. in 1833 to 32s. 6d. at the present time.²

"But perhaps one of the most remarkable instances of improvement of social condition is that of the Northumberland coal-miner. Two generations ago he was a helpless, degraded wage-slave, utterly without the means of resisting the worst abuses of capitalist tyranny. The hewer of 1830, if we may trust a contemporary pamphlet, often received no more than 11s. or 12s. a week for ten or twelve hours a day under ground. The miners' delegates meeting settled the strike of 1831 on terms which included a minimum of 30s. per fortnight for twelve hours a day.³ But the miner was constantly cheated in the weight of coal drawn, and in the food and other necessaries which he was compelled to buy at his employer's 'tommy shop.' Spasmodic

¹ Undoubtedly the industry of Great Britain received a tremendous impetus from the adoption of a Free Trade policy, which enabled her manufacturers to buy all their raw material in the cheapest markets, and thus to compete successfully with foreign rivals. Moreover, she was first in the field in the manufacture of many classes of machinery and the development of a highly organised factory system. These circumstances gave her an advantage over her competitors which she has never lost. They have contributed in a large measure to the prosperity of her industry and the welfare of the workers engaged in it.

² See *Labour in the Longest Reign*, Sidney Webb, pp. 11 and 12 (Grant Richards, 1897), for early wages, and Od. 3245 for modern ones.

³ See *An Appeal to the Public from the Pitmen*, Delegates' Meeting Newcastle, May 6, 1831, reprinted in the Appendix to Fynes' *Miners of Northumberland and Durham* (Blyth, 1873); quoted in *History of Trade Unionism*, Sidney Webb, p. 110.

rebellions resulted in particular martyrdoms, without producing either any durable combination or any appreciable improvement in the miner's lot. His yearly bond, enforced by ruthless magistrates, kept him in a position little better than serfdom, whilst the utter absence of any provision for education seemed to leave no ray of hope for any uplifting of his class. Now the Northumberland miner stands in the very front rank of what is often, not inappropriately, termed the aristocracy of labour. A strong and admirably led Trade Union defends him both from the employer's tyranny and the accidental fluctuations of earnings which arise from the changing character of the 'face' of the mine. He has secured effective legislative protection against fraud, and, to no small extent, against the avoidable dangers of his calling. He works hard, but his labour is concentrated into fewer hours, so as to leave him leisure for public and private affairs."¹

The splendid progress of the Northumberland miners has been shared, in greater or less degree, by many other classes, and perhaps further illustrations need not be given. It will not be disputed that there has been an enormous improvement in the conditions of the industrial population in Britain during the last sixty or seventy years. Generally speaking, the rise in the money wages of male workers has probably been from 50 to 100 per cent, and the increase in the purchasing power of wages is considerably more.²

By what means has this great improvement been brought about? Two of the most important factors in it are revealed above—the protection by factory legislation, and Trade Unions. The new era for the Northumberland miners dates from the passing of the Mines Regulation Act in 1842. Before this they were like men in a bog, who could not find any firm ground for their feet, and their endeavours to rise were of no avail. But the Act of 1842,

¹ *Labour in the Longest Reign*, pp. 13-15.

² See various articles in *Journal of Royal Statistical Society* by Messrs. Bowley and Wood.

The writer does not forget that there is a residuum of the population living on the margin of subsistence, whose lot could not have been much worse in 1830 than it is now. It is possible that the size of this residuum is as large, or even larger, now than seventy years ago, but it bears a smaller proportion to the total population. The writer is also aware that a considerable rise has taken place in Belgian wages during the last seventy years, and that they are still advancing, but, as stated above, they are only now, in many cases, at the level of British wages in 1830.

which secured them against the worst abuses of competition, gave them leverage, making it possible for them to struggle effectively upwards; and if we study the British labour movement generally, we shall see how beneficial have been the effects of much of the factory legislation.

Perhaps its greatest use has been the compulsory reduction in the hours of labour. "A worker who is employed from morning till night," says Sidney Webb, "especially if his work is monotonous or without real intellectual dignity, suffers a subtle degradation of character. Instead of a man and a citizen he becomes merely a 'hand.' I believe that nothing has so powerfully contributed towards the rise in the standard of life of our wage-earners as the general diminution which has taken place in the hours of labour. The Factory Acts were the salvation of Lancashire."¹

A shortening of the hours of labour enables the workers to read more, to think more, to spend more time in conferring with their fellows on what is needed for the advancement of their class, and to develop energy, initiative, and individuality. It renders home life and the growth of a spirit of fellowship between parents and children possible, and, viewed merely from the physical standpoint, its benefits are incalculable.

But factory legislation, although a very important factor in industrial progress, can of itself do little more than give the workers the power to improve their own condition, and among the means which they employ, the substitution of collective for individual bargaining takes the first place. The fact that under the modern system, the unorganised worker cannot secure the full economic value of his labour, is illustrated on every page of the industrial history of Britain in the nineteenth century.² The enormous growth in the membership and power of British Trade Unions is a fact of primary importance. Without it the great improve-

¹ *Labour in the Longest Reign*, p. 36.

² By "full economic value" is here meant the maximum sum which the employer will pay rather than lose the services of the worker.

ment in the lot of the workers during the last seventy or eighty years would have been impossible.

These direct measures, namely, factory legislation and combination, must, however, be associated with others if they are to be effective. There is no doubt whatever that the passing of the Education Act in 1870, which very soon led up to compulsory education in England, and did so much to raise the standard of instruction, enormously strengthened the working classes in their efforts to improve their lot. A certain measure of education is necessary to make a man an effective trade unionist, and the more highly he is educated the more likely is he to understand and appreciate the importance of combination, and to take an intelligent part in politics and all kinds of social movements. An uneducated man is largely shut off from these and other intellectual interests, and he is prone to seek relief from the monotony of his work in the public-house—perhaps the greatest enemy to the creation of that spirit among working-men which is essential to their welfare.

This brief review of some of the main causes which have made for progress and improvement in Britain serves to indicate the direction in which they may be looked for in Belgium. First, the factory legislation should give to the workers much more protection from the worst abuses of competition than they now have, especially in the matter of the length of the working day, and the authorities must see that it is enforced. Next, the workers themselves must recognise much more generally than they do now that they will never secure the full economic reward of their labour until they substitute collective for individual bargaining with their employers, and make their Trade Unions much more effective than at present.

Other factors, which must come into play if the lot of the Belgian workman is ever to rise to the point achieved by his fellow-worker in Britain, may be briefly enumerated. The standard of education must be raised and education made compulsory upon every citizen. The school life must

be lengthened. Steps must be taken to lessen the sale of drink and so to strengthen the temperance sentiment—weak enough in Britain, but weaker still in Belgium—that it may no longer be possible to say that more than one-sixth of the very inadequate income of the working classes is spent on drink instead of on food and clothing.¹

Thirdly, influences which sap the independence and virility of the democracy must be removed. The present system of charitable relief should be reformed. Relief, whether private or public, should always be administered with the purpose of rendering the recipient independent at the earliest possible moment, and never with the object of gaining personal, political, or denominational ascendance over him.

Lastly, the workers should set before themselves a high ideal, embracing not only physical well-being, but service, comradeship, and the free development of their mental and spiritual resources—an ideal that would give them moral stamina and a determination to shake off oppression, whatever its source.

There is no doubt that if the people became more intelligent, more sober, more independent, and conscious of a deeper meaning in life, they would refuse to submit to the long hours and low wages of to-day, and the very factors which elevated their aims would give them the power to realise them in a certain measure. Their industrial efficiency would increase, and they would be better qualified so to organise the forces of labour as to substitute collective for individual bargaining.

At first sight it might appear that if the reforms suggested above were carried out, it would be difficult for

¹ It may be said that the working classes in England still spend almost one-sixth of their income on drink. But it must be remembered, first, that the proportion so spent is diminishing; and, secondly, that their income considerably exceeds that of the Belgians, and so although the sum spent on drink is greater, the sum remaining for the supply of food, clothing, etc., is also greater; thirdly, drink is cheaper in Belgium than in Britain; and, lastly, there is probably a much larger proportion of people in England who are absolutely or virtually abstainers, and it is among these that many of the leaders of the labour movement are to be found. In Belgium the number of abstainers is exceedingly small.

the employers to live, but on a closer view it will be seen that, speaking generally, improvement makes for improvement. More intelligent workmen strengthen their combinations and exact higher wages, but they are capable of earning them. They provoke the manufacturer to fresh exertions, and out of the conflict there emerges a class of employers able to meet the new situation by improving the equipment and organisation of their factories, and generally developing industry on profitable lines.¹

THE AGRICULTURAL POPULATION

(a) *Tenants*

We turn now to the agriculturists, two-thirds of whom, it will be remembered, are farmers and members of their families working with them, and only one-third paid labourers. As the average size of holding in Belgium (excluding those under 1 acre) is only $14\frac{1}{2}$ acres, and as the majority of paid labourers will in time probably become small holders, our attention may be confined to the lot of the peasant cultivators, and in the first instance to those who are tenants and not owners.² It has been shown how many are the advantages enjoyed by the agriculturists of Belgium: among them, ample means of cheap and rapid

¹ It is probable that the methods suggested above for raising wages in Belgium are those which must be employed to improve the lot of the worst-paid workers in Britain, who form the residuum of the industrial population, and many of whom are home workers. They require legislative help to protect them from the worst abuses of competition. Such legislation may be directed to shortening the hours of labour, forbidding the employment of children below a certain age, insisting upon a proper standard of sanitation in rooms where work is done, and on a minimum wage. The experience of Belgium confirms previous experience in Britain, that until some support of this kind is given, workers who are living almost on the margin of subsistence are not capable of taking the steps necessary to improve their lot. It must, however, be remembered that such legislation must be followed by the substitution on the part of the workers themselves of collective for individual bargaining, and the development of a higher standard of education and sobriety, a greater spirit of personal independence, and a more worthy ideal of life.

² Two-thirds of the land of Belgium is cultivated by tenants and only one-third by owners.

transit, a good system of agricultural education, and co-operative societies everywhere for all kinds of purposes, including the provision of capital and the insurance of live-stock at very low rates. Surely with all these blessings their life should be almost ideal! But is it? A closer acquaintance with the small holder shows us that although he seldom, perhaps never, suffers from want, he generally lives roughly, and, except in winter, works unreasonably long hours for low pay. Undoubtedly, his state is much better now than in the past; still the improvement is not nearly so great as might have been expected from the extraordinary developments in the organisation and science of agriculture during recent years. The *immediate* cause of this is that the rent of land is so high—twice as high as in 1846, and nearly twice as high as in England at the present time. This being so, the tenant cannot pay it without living sparely and working excessively hard.

On the average, the rent of agricultural land in Belgium is 36s. 3d. an acre, against 20s. in England, a difference which amounts to about £19 a year or 7s. 3d. a week on a holding of 25 acres.¹ When it is remembered that the total net income of a small holder is very limited, it will be seen that the sum of 7s. 3d. a week is enough to make the difference between straitened and easy circumstances. It is much as though it were subtracted every week from the wages of a man earning 30s.

(b) *Owners*

So far we have dealt only with the small holders who are *tenants*. But what of those who are proprietors of their holdings, a class by whom a third part of the land of

¹ The writer recognises that he is dealing here with average rents, that is, rents of large and small farms taken together, and that in England the rent of small farms is considerably above the average, while in Belgium the two figures tend to approximate because the average farm is much smaller. Against this, however, must be set the fact that the English figure of 20s. is for farms *including* buildings, whereas the Belgian figure of 36s. 3d. is for agricultural land *without* buildings. In England the rent of very small farms is often high because of the buildings attached to them.

Belgium is cultivated? Is their lot a desirable one, and does the solution of the problem of poverty in agricultural districts lie in the direction of making the tenants into proprietors? As pointed out in Chapter XVI, the peasant proprietor's mode of life is very similar to that of the tenant. Both have to live sparsely and work extremely hard to make a living. This may at first sight seem an extraordinary fact, for one would suppose that high land values, which affect the tenant so adversely, would operate in favour of the owner. The explanation of the seeming anomaly is that land belonging to a peasant is scarcely ever sold except on the death of the owner. When a peasant dies leaving his property to his children, those who wish to carry on agriculture find that their personal shares are insufficient and, consequently, are compelled either to buy or to rent more land. If they buy, the high price which has to be paid makes the purchase burdensome. It is true that the children who forsake agriculture for the town benefit by high land values, whether they sell their shares or let them, but those who remain agriculturists suffer, as do all other peasant proprietors who have not enough land on which to live comfortably and wish to add to their holdings.¹

Thus we see that in the case of the peasant proprietors, as well as in that of the tenants, the immediate cause of the hardness of their lives is not that they cannot produce enough from the soil, but that land values are so high.

REASONS FOR HIGH COST AND RENT OF LAND

The reason why they are so high is that the demand for land is so keen. But why does this continue so keen even

¹ In the case of proprietors who inherit as much land as they require and are not obliged to buy, increase in its value is of course an unmixed advantage. But the small holder seldom does inherit enough, and is almost invariably obliged to buy or rent more before he has sufficient for the maintenance of his family, and hence the apparent paradox that high land values oblige peasant proprietors as well as tenants to work inordinately hard for a living. In this connection it may be noted that the districts of Belgium where the land is the most subdivided are those where the birth-rate is the highest.

when rents and prices have been driven up to a point at which the peasants can only pay them by dint of excessive toil and abstinence from every luxury? In seeking to answer this question let us again go back to England. Why are the wages of agricultural labourers in Durham almost half as high again as they are in Dorset? It may be answered that the Durham labourer is worth much more than the Dorset man. But there is no racial difference between the men in the south and the men in the north sufficient to account for these different values. The Dorset labourer, through inadequate food and bad housing conditions, may just now be worth far less as a worker than his compatriot in Durham, but with equal advantages for a few years the values would rapidly approximate. The true reply is that the Durham labourers always have the alternative of work in the mines open to them when bargaining with farmers, and unless they can get comparatively high pay for work in the fields they will not undertake it. The Dorset labourer has no such alternative so long as he remains in Dorset. To draw the parallel—if rents in Belgium fall, it will be because the peasant is provided with an alternative to living upon the soil sufficiently attractive sensibly to strengthen his economic position when bargaining with a landlord. His need of land will be less imperative.

But will such an alternative be found in Belgium itself or must it be sought in new countries, like the United States, Argentina, or Canada? In considering the latter possibility it is important to note that with improved education and general intelligence there will come a wider knowledge of the conditions of life in other parts of the world, and a greater willingness to face them. Thus emigration in the future may do something. Still it is probable that Belgium will find the main fulcrum for raising the peasant holders to a higher level, in her own industrialism, although at the present time the town workers are relatively worse off than the peasants themselves. There seems, however, to be no reason in the nature of things why the Belgian miner or worker in iron or textiles should not at least rise to the

position of his British fellow-worker, and if this happened, the tenant would have a better alternative when striking a bargain with the landlord. Rather than continue to pay the present rents, peasants would leave the country for the town. The demand for land would become less keen, and the consequent drop in rent and cost would so relieve the peasants left behind that their general standard of comfort would rise to that of the industrial workman.¹

NEED FOR SECURING UNEARNED INCREMENT

But do not the facts given in this volume point to an additional method of benefiting the small holder? It has been shown that the advantages arising from the development of transport facilities, good agricultural education, the wise employment of chemical manure, co-operation for the economical purchase of feeding-stuffs and seeds, and the

¹ It should be noted that the drop in the demand for farms need not be so great as might at first sight appear in order sensibly to lower rents. It is well known that when there is a scarcity in any article of necessity or primary importance leading to an advance in price, whether it be coal or food, the advance is altogether disproportionate to the scarcity, inasmuch as the advance has to reach a point at which it lessens consumption; and in the same way a decline in the price of commodities is relatively greater than the decrease in the demand for them. It may be argued that in Britain, where the expedient of providing a good alternative for the agricultural workers has already been tried, the result has been to depopulate the country districts, and that the same result would probably follow in Belgium. A little consideration will, however, show that the conditions in the two countries are very different. As already stated, 65 per cent of the agricultural population in Belgium consists of farmers and members of their families working with them, and only 35 per cent are paid labourers, while in Britain these figures are reversed. It is obvious that the attachment of the small holder to the soil is much closer than that of the labourer, and it must also be remembered that the organisation of agriculture and of village life in Belgium is such that the country is much more interesting and less lonely than in Britain. The great extension of railways has quickened the most remote districts, and the various societies connected with the different phases of the co-operative movement give a flavour to existence.

The attitude of many Englishmen to country life was exemplified to the writer a day or two before he wrote these pages, when a man came to see him who was out of work. Originally he had been an agricultural labourer, but for the last fourteen years he had been working in towns. When it was suggested to him that he should return to the country, he remarked: "Oh yes, I know it may have to come to that, but when I lived there, I felt as if I was buried alive."

energy spent on improving the livestock, ultimately go past the tenant to the owner of the land. But why should this state of things continue? Why should men who happen to own the agricultural land of Belgium secure to themselves the advances in land values due to the industry and intelligence of the workers and the wise action of the Government? Most economists will agree that this unearned increment due to the conjoint action and expenditure of the State and of the workers should, altogether or in part, go to the community which has created it.

The question of unearned increment, viewed from the practical side, is widely different in Belgium and in Britain. In the latter country, along with the great advances in the value of land in the larger centres of population, there has been a great decline in the value of agricultural land. In Belgium, however, there has been a great advance in both, although in the Belgian towns the advance has not been so extreme as in Britain, owing to the facilities given to the town worker for living in the country. Considerations of policy and justice alike should, therefore, induce the Belgian State to secure to itself by one of the many available means, either part or the whole of the future increment, which, wisely used, would lighten the burden of taxation on those who can least afford to bear it, and in countless ways alleviate the hardships of the people and promote the general good.¹

If since 1846 the fiscal arrangements of Belgium had been such that all unearned increments in agricultural land values had gone to the community instead of going to the accidental owners of the soil, her national exchequer would now be receiving from this source annually a sum which would probably amount to more than two million pounds; and it must be remembered that this represents only the

¹ It may be urged that increments in agricultural land values should be reserved for the benefit of the agricultural population. But this would be unnecessary, even if it were practicable, since the rural districts in their turn would benefit by increments in urban land values. Moreover, all the taxpayers contribute to the funds from which Government help is granted to either town or country.

increment in agricultural land values;¹ it takes no account of unearned increments in towns. Unfortunately there are no figures on which to base even a rough estimate of the amount of these, but there is no doubt that it must be very large. But, even leaving all urban increments out of account, the increment in agricultural values alone, represents over 30 per cent of the total sum raised annually by national and local taxation in Belgium. This fact shows how supremely important it is that the Belgian people should secure future increments in land values for the community.

It may be argued that since there are nearly 720,000 landowners in Belgium, the distribution of unearned increments is already so general that this question need not trouble us. But although land is much more widely distributed than in most countries, and enormously more so than in Britain, even in Belgium it is true that 62 per cent of the land is owned by $2\frac{1}{2}$ per cent of the total owners, while four-fifths of the 720,000 owners have less than 5 acres each.

If even in Belgium the large landowners absorb the lion's share of the profits of agriculture, it seems probable that in Britain, where land monopolies are far stronger, the problem of unearned agricultural increments might become even more serious if agriculture were successfully developed. Such a contingency cannot be lightly dismissed when we recall what has actually happened in connection with urban land values in the great cities of the United Kingdom.

LESSONS FOR BRITAIN

Let us return, now that we have finished our survey of the social and economic conditions in Belgium, to the question with which this book opened, and see what light the lessons we have learned throw on the poverty problem in Britain, and especially on its relation to the system of land tenure. If there are certain things which Belgium may learn from

¹ The total increment in agricultural land values since 1846 is about £3,373,000 a year.

Britain, there are many which she may teach her, for Belgium is in advance of Britain in many directions, as the pages of this book have shown.

At the root of the social and economic life of Belgium lies a fact of vital importance—namely, the extraordinarily wide distribution of the land among the people—a distribution so general that one in every ten of the population is a landowner, and there are only twenty-seven men in the whole country who own as much as 5000 acres. This is the fundamental difference between Belgium and Britain, and it underlies most of the lessons which Belgium has to teach.

For instance, our study of her agriculture has shown that she succeeds in employing on the land a population three times as dense as Britain, and that her agriculture is based on a system of small holdings. It is difficult to forecast the future of agriculture in Britain, but Belgian experience encourages the belief that we may look forward with hope to the establishment of a great number of small holders upon the soil, and it points out the conditions necessary to their success.

First, steps must be taken which will make it easy for men to obtain land in small plots, either by purchase, or as tenants with reasonable security of tenure.¹ The objection felt by many large landowners, and more especially by their agents, to the establishment of small holdings must in some way be overcome.²

But it will not suffice merely to cut up the land into small holdings—other conditions are needful for success. First comes the provision of adequate means of cheap and rapid transit throughout the country districts, and Belgium gives us a most valuable example of how this can be achieved. Then the fullest possible use must be made of

¹ In this connection it must be remembered that although by law the Belgian tenant has very little security of tenure, in practice he does not suffer materially from lack of it.

² It is this objection which accounts in part for the comparatively meagre results which have followed the passing of the Small Holdings Act by the British Parliament in 1908.

co-operation, not only in the purchase, and possibly in the sale, of produce, but in the insurance and improvement of livestock, and the provision of cheap capital. Here again the experience of Belgium will repay careful study. Agricultural education of a kind suitable for small holders must be provided on a liberal scale, and it must be made easy for them to obtain expert advice without cost, as in Belgium. Unless the price of food is to be raised against the people by the protection of farmers who are behind the times, agriculturists must expect to meet with keen competition, and can only succeed if they employ the best methods.

If we follow the lead of Belgium in these matters, and in various others which are dealt with in this volume, we may expect to see the rural districts of Britain re-peopled and her agriculture once more prospering.¹ The effect of this would be to check the present steady migration of agricultural labour to the towns, and by lessening the supply of labour there, to strengthen the position of the town workmen, and raise their wages. This in its turn would strengthen the position of the agriculturists when bargaining with their landlords, for town labour would provide a better alternative to work on the land than it did before. It will thus be seen that the benefits arising from a development of agriculture would be very widely felt.

Turning to town life, Belgian experience shows how far-reaching are the effects of the system of land tenure upon the industrial population. In Britain we are confronted with the rush to the towns which has been so striking and ominous a feature of our national life during the last half century. All are agreed as to the physical deterioration resulting from the migration of country people to overcrowded urban areas, and yet the drift continues. Belgian experience can help us to prevent it, and shows that the land question lies at the root of the problem.

¹ If every acre of cultivated land in Britain employed as many workers as in Belgium, work on the land would be provided for about $3\frac{1}{2}$ million more workers than at present.

We have seen that although the population of Belgium is denser than that of England and Wales, the proportion of her population residing in rural districts is $2\frac{1}{2}$ times as great. This is only partly accounted for by the great development of agriculture, for whereas only 23 per cent of her working population are engaged in agriculture, 56 per cent of her total population live in the country. The immediate explanation of this fact is that on the Belgian National Railways facilities are given to workmen enabling them to travel at extraordinarily low rates, and, in consequence, thousands upon thousands of them, although working in the towns, continue to live in the country. But they could not do so unless they could easily get houses with plots of land attached to them. So long as great zones of land around our British towns are owned by men who for one reason or another refuse to let or sell small plots upon reasonable terms, decentralisation of our town populations will remain impossible. It would have been impossible in Belgium but for the wide distribution of land among the people, owing to which sites of a size and character suited to the needs of industrial workmen are constantly available. It must be noted that decentralisation is not only an advantage to those town workers who live in the country, but to those living in the town, for it keeps down town rents, and thus does much to help to solve the housing problem. If town landlords sought to raise their rents above a certain level, the population would leave the towns, and travel to and from their work.¹ All this has an important bearing on the question of unemployment. It shows us that not only do cheap transit facilities lessen the volume of this evil by rendering labour more mobile, but they mitigate its consequences to the town workers whom they enable to live in the country. A man living in the country, when his regular occupation fails him, can generally manage to exist with the help of his plot of land. His life

¹ Certainly this tends slightly to raise rents in the country, but probably the total net result of the distribution of population is a reduction in rentals. Belgian housing legislation, especially the Act of 1889, is worthy of careful study by housing reformers in other countries.

may be hard, and his diet may consist chiefly of bread, potatoes, and a few green vegetables, with a very little bacon, but he suffers much less acutely than his comrade in the town, who has nothing to fall back upon, and who, when he has sold his bits of furniture, must either subsist on charity, go to the workhouse, or starve. Often, too, Belgian workmen, who, by living in the country, have kept in touch with country work, country interests, and country people, can find a job with a neighbouring farmer when there is nothing to be done in their own trade.

It may be mentioned in passing that the forests of Belgium— $4\frac{1}{2}$ times as extensive in proportion to the area of the country as those of Britain—materially help to regulate the labour market and prevent unemployment, and that, by scientific management, the Belgians obtain a satisfactory return on the capital they invest in them.

So far we have considered matters in which it may very likely be well that Britain should follow the example of Belgium. Now we turn to others in which her example must serve as a warning. It shows us the wonderful results that can be achieved in agriculture, but it shows us also that these have mainly benefited, not the workers, but the accidental owners of the soil. Agriculture has been transformed, but the lot of the agriculturist remains hard. In Britain, too, rents will rise if active and successful steps are taken to develop agriculture, although probably not, for some time to come, to so high a point as in Belgium, because industry affords a better alternative to the agricultural worker, and therefore he will not be willing to pay in rent so large a proportion of the total product of his holding.¹ At the present time the rental value of agricultural land in Belgium is about sixteen shillings an acre higher than in England. But if we assume that as a result of agricultural development in England and Wales farm rents were to rise by only half that amount,

¹ But with increasing knowledge of agricultural science it may become possible for the workers greatly to increase the rents they pay, and still have enough left to induce them to stay on the land.

this would be equivalent to a total of about eleven million pounds a year. We have seen that Belgium has allowed the increments in the site values of agricultural land to go to the accidental owners of the soil, as such, quite apart from whether they have or have not done anything to produce them. We have seen what has been the effect of this policy on the social well-being of the agricultural workers, and are forced to ask ourselves whether Belgian experience does not point to the desirability of adopting in this country some method whereby unearned increments in the value of agricultural land shall, either entirely or in part, go to the community.¹ If Belgian experience points strongly in this direction, British experience is eloquent in declaring how enormous have been the losses to the community through allowing unearned increments in urban land values to go into private pockets. It has been shown that although agricultural rents in Belgium are nearly twice as high as in Britain, town rents are lower, because the monopoly of the town landlord is so largely destroyed by the wide distribution of land, and by the decentralisation of the urban population. There is abundant evidence that the increments in urban land values, even in Belgium, although much lower than in Britain, are very substantial, and they are growing daily.

In unearned increments, both urban and rural, there is a source of revenue which will grow with every development of agriculture, industry, and commerce. To take advantage of it would discourage no industry, and rob no individual, but would in time sensibly lessen the burden of taxation on the community at large.

¹ Of course this is not intended to apply to increments due to the expenditure or effort of the landlords. It refers only to such as are caused by a growing keenness in the demand for land.

APPENDICES

APPENDIX I

DETAILED ACCOUNT OF METHODS EMPLOYED TO ARRIVE AT THE NUMBER OF PROPRIETORS IN BELGIUM

As explained in Chapter IV., the investigation was divided into two parts: first, to ascertain the total holding of *every* proprietor throughout Belgium who was the sole owner of as much as 62 acres (25 hectares) in one block in one commune,¹ and secondly, the total amount of land held by *every* landowner, great and small, in 28 communes, carefully selected as typical of the whole country. It will be simplest first to describe the method of investigation in the 28 communes.

In Belgium there is a separate land register for each commune, giving, among other information, the name and profession of every one owning land within it, and the extent of the holding, distinguishing between land which is and is not built upon.² Exact copies of these registers are kept in offices in the nine provincial capitals.

Our first step was to have this information copied on specially prepared cards for every one of the 13,316 landowners in the 28 selected communes. Cards of three colours were used—white ones for land held by a single owner, orange ones for land held in partnership by two or more persons, or let on long lease (*emphytéose*),³ or held by one person on condition that some one else had a life-interest in it (*usufruct*),⁴ and green ones for a purpose to be explained later. The work of copying was undertaken by the officials in the nine provincial land registry offices, and, when completed, the cards were sent through the intermediary of the Ministry of Finance to an office

¹ If a man was sole proprietor of 62 acres in one block, all his other land, including land held in partnership, was taken into account. But the sole proprietor of less than 62 acres—say 50—was not included in the enquiry, even if he owned another 50 in one block in co-proprietorship. Owing to the way in which the land register is kept, it would have added enormously to the labour involved if such proprietors had been included.

² A specimen page of the land register is given at p. 554.

³ Land let on emphyteutic leases (*i.e.* for periods varying from twenty-seven to ninety-nine years) was regarded as being the property of the landlord, *i.e.* the actual proprietor of the land and not of the tenant.

⁴ Any one who had a life-interest in land was regarded as the proprietor.

in Brussels installed by the writer especially for this work. First, the land held in partnership was dealt with. Suppose that an orange card showed that three acres of land were owned conjointly by three men, then two green cards were prepared, on each of which was written the name of one of the three, a third part of the total holding being ascribed to him. The original orange card was retained, with the name of one of the co-proprietors still on it as owner of the remaining third. Thus in the final reckoning up, this plot of three acres, owned in partnership by three men, would appear as three plots of one acre, each owned by one man.¹ When all the green cards were filled in, the whole of the cards were classified alphabetically, those for each commune being kept separate.

But, so far, we only knew the land held by these proprietors *within their own communes*, and to ascertain what other land they might hold, it was necessary to turn to fresh sources of information. Here it must be explained that in the Belgian system of land registration the country is divided into 173 districts, with an official in charge of each called a *receveur*. Each *receveur* keeps a list, not only of the landowners in his district, but of the different communes within it in which each of them owns land, and the number in the communal land register attached to every parcel. He also knows in which other *receveurs'* districts each proprietor living in his own district has land.

In order to complete our enquiry, all our cards were classified according to the domicile of the owners, and this done, a portion of the information contained on each was transcribed on a specially prepared form, a copy of which is given on p. 555.

The forms for each *receveur's* district were kept separate, and sent out officially by the Ministry to the *receveurs*, with the request that they should fill in columns 6, 7, and 8, the first five columns having been filled in by us. The further steps to be taken depended upon circumstances, and can be described most simply by reference to the copy of the form just mentioned.

In the case of Jean Dupont no further enquiry was needed, for he owned no land outside the commune. In that of Joseph Durand it transpired that he owned land in two communes, viz. Auderghem and Hoeylaert, in the district of the *receveur* who had filled in the form, but none in the other districts. It was, therefore, necessary to send to the capital town of the province in which Auderghem and Hoeylaert are situated, and ask the cadastral officials to supply information regarding the property owned by Joseph Durand in these communes. This was supplied on a white card, No. 1 (see p. 556). When this information was received in Brussels, the card was examined to see whether the official land registry numbers ascribed to the various

¹ Any other way of dealing with such cases seemed to lead to hopeless confusion, for there are many cases where one man owns, for example, three or four plots in his own right, another plot in conjunction with two partners, and another in conjunction with three, and so forth.

holdings agreed with those given by the *receveur*—in this case, whether they referred to plots Nos. 60, 59, and 68. If they did, then we were sure we had correct information regarding all the land owned by Durand, but if they did not, then special enquiry was made to explain the discrepancy. The correspondence involved in connection with discrepancies of this kind was enormous, but without it considerable errors would have occurred.

The case of Alfred Lenoir (typical of many we had to deal with) was more complicated, for in addition to owning land in two communes in the district of the *receveur* who supplied the information, he owned it in the districts of five other *receveurs*. So far as concerns the land owned in the two communes in the *receveur's* own district, the process to be gone through was exactly the same as in the case of Joseph Durand. But in addition to this it was necessary to communicate with the five *receveurs* in whose districts Vilvorde, Anvers (Nord), Malines, Liège, and Herstal are situated, asking them to state in what communes in each of these districts Alfred Lenoir owned land, and to give the numbers in the communal land registers of the plots belonging to him. This information received, the next step was to communicate with the officials in the land registry offices in the capital towns of the provinces in which these various communes were situated, asking them to copy on cards similar to No. 1 or No. 2,¹ as the case might require, information as to the property owned by Alfred Lenoir in these communes. When this had been received, and checked to see that the official numbers of the plots agreed with those given by the *receveurs*, it only remained to add up the areas of all the plots owned by Alfred Lenoir in different parts of the country to arrive at his total holding.

The information regarding the holdings of the large proprietors throughout Belgium, viz. all those who own as much as 62 acres in one block in one commune, was obtained in precisely the same way; but first it was necessary to examine every communal land register, and to copy, on cards 1 or 2, according to circumstances, the names of all such proprietors. This done, the process to be gone through was identical with that described above, but of course the proportion of complicated cases, similar to that of Alfred Lenoir, was larger in the case of the large owners, as most of these had land in different parts of Belgium.

The method of utilising the information obtained as to the small proprietors² in the twenty-eight communes, in order to arrive at the number of such proprietors in the whole of Belgium, was as follows:

The area of the twenty-eight communes investigated (exclusive of

¹ For copy of the forms of card employed see p. 556.

² Those holding less than 62 acres in one block.

the land owned by the large proprietors) was 45,942 acres. The total area of Belgium (exclusive of the land owned by the large proprietors) is 3,282,319 acres.

In the case of those who held land in one of the twenty-eight communes only, the number of proprietors in the twenty-eight communes was multiplied by $\frac{3,282,319}{45,942}$ to give the total number of such proprietors in Belgium.

In the case of proprietors with holdings in two communes (*i.e.* one within and one without the investigated area), a similar rule-of-three calculation gave the total number of *holdings*, and as each proprietor was represented by two holdings, this number divided by 2 gave the total number of such proprietors in Belgium.

Similarly, in the case of proprietors with holdings in 3, 4, 5, . . . communes the number of holdings was divided by 3, 4, 5, . . . respectively.¹

¹ The writer is much indebted to Professor Bowley of the School of Economics, London, and to M. Varlez of Ghent, for much help given in connection with the above calculations; they have not only suggested the particular method of calculation adopted, but tested it in various ways and proved its accuracy.

PAGE FROM ONE OF THE PROVINCIAL REGISTERS WHICH WERE OUR CHIEF SOURCE OF IN-
 y-eight communes enquiry, one of these registers was investigated for each property, and land with buildings
 carefully distinguished from land without buildings.

Section.	Renvois aux plans cadastraux.		Contenance de chaque parcelle.			Classement.	Revenu imposable de chaque parcelle.		Indication succincte des mutations qui ont eu lieu.	des d'ord d'ou l Art.
	N ^o des parcelles.	Nature des propriétés.	H.	A.	C.		Non-bâtie.	Bâtie.		
	Lenoir, Jean, fermier à Liège.									
	Lenoir Dupont, François-Joseph, la veuve et les enfants, fermiers, à Liège.									
	let 1888). Lenoir-Dupont, veuve François-Joseph (Marie), particulière, à Gand.									
K	163	huis	02	..	85	2-04	72	Acquisition (1er s ^{bre} 1861)	388	
	244 ^c	land	20	50	2-2	10-47	..	Acq ^{on} (6 juin 1868)	211	
	278 ^{d1}	huis	01	00	..	1-44	..	Acq ^{on} (28 9 ^{bre} 1868)	541	
	234 ^d	magazijn	02	70	..	2-05	..	Nouvelle construction	438	
	234 ^e	huis	..	40	..	..	..	id.	..
	234 ^f	id.	..	40	..	..	..	id.	..
	234 ^g	id.	..	40	..	..	..	id.	..
	234 ^h	id.	..	40	..	..	..	id.	..
	234 ⁱ	id.	..	40	..	..	..	id.	..
	234 ^j	id.	..	40	..	..	..	id.	..
	234 ^k	id.	..	40	..	..	..	id.	..
	234 ^l	land	10	20	3	7-75	..	Division de numéro	..	
	234 ^m	id.	12	90	2	14-71	..	id.	..	
	235 ^a	id.	05	..	3	3-60	..	Acquisition (22 s ^{bre} 1875)	587	
	278 ^{d1}	huis	01	00	76	1-44	190	Exemption expirée	438	
	234 ⁿ	magazijn	02	70	36	2-09	12	id.	..	
	234 ^o	huis	..	40	87	..	60	id.	..	
	234 ^p	id.	..	40	87	..	60	id.	..	
	234 ^q	id.	..	40	87	..	60	id.	..	
	234 ^r	id.	..	40	87	..	60	id.	..	
	234 ^s	id.	..	40	87	..	60	id.	..	
	234 ^t	id.	..	40	87	..	60	id.	..	
	169 ^a	id.	01	28	01	2-10	36	Partage (17 mai 1888) et division de numéro	..	
	162 ^b	id.	..	62	31	..	36	id.	..	
	163 ^a	id.	06	30	86	9-43	66	Acquisition (10 mai 1882)	215	
	164 ^a	land	08	50	1	12-92	..	id.	..	
	165 ^a	id.	58	60	1-2	77-93	..	id.	..	
	234 ⁿ	bouwgrond	06	47	..	6-24	..	Division de numéro	438	
	234 ^o	huis	..	01	..	1-04	..	Nelle construction	..	
	234 ^p	id.	..	01	..	1-04	..	id.	..	
	234 ^q	id.	..	00	..	1-03	..	id.	..	
	234 ^r	id.	..	00	..	1-03	..	id.	..	
	234 ^s	id.	01	16	..	1-22	..	id.	..	
	234 ^t	id.	..	89	..	1-01	..	id.	..	
	234 ^u	id.	..	88	..	1-00	..	id.	..	
	234 ^v	id.	..	88	..	1-00	..	id.	..	
	234 ^w	id.	..	91	83	1-04	96	Devenue imposable	..	
	234 ^x	id.	..	91	83	1-04	96	id.	..	
	234 ^y	id.	..	90	83	1-03	96	id.	..	
	234 ^z	id.	..	90	88	1-03	96	id.	..	
	234 ^a	id.	01	16	76	1-32	150	id.	..	
	234 ^b	id.	..	89	83	1-01	96	id.	..	
	234 ^c	id.	..	88	83	1-	96	id.	..	
	234 ^d	id.	..	88	83	1-	96	id.	..	
	278 ^{o2}	id.	01	90	76	1-44	190	Agrandissement	56	
	232 ^a	bouwgrond	08	50	2-3	8-07	..	id.	438	
	234 ^e	huis	..	93	6-2	1-06	..	Nelle construction	..	
	234 ^f	id.	01	21	6-2	1-38	..	id.	..	
	234 ^g	id.	01	11	6-2	1-27	..	id.	..	
	234 ^h	id.	..	93	78	1-06	132	Devenue imposable	..	
	234 ⁱ	id.	01	21	76	1-38	150	id.	..	
	234 ^j	id.	01	11	77	1-27	144	id.	..	
	234 ^k	id.	01	70	78	1-61	132	Nelle construction	..	
	234 ^l	id.	01	70	78	1-61	132	id.	..	
	234 ^m	id.	01	70	78	1-61	132	id.	..	
	234 ⁿ	id.	01	70	78	1-62	132	id.	..	
	234 ^o	id.	01	70	78	1-62	132	id.	..	

Monsieur le Receveur de l'enregistrement, à Iselles, est prié de fournir, d'après les indications de la table générale des propriétaires, les renseignements demandés par les colonnes 6, 7 et 8 du tableau ci-dessous.

Imp. A. LEBLANC - N° 103-104

DÉSIGNATION DES PROPRIÉTAIRES INSCRITS AU CADASTRE DE LA COMMUNE CIORESSOU				AUTRE COMMUNE DE REMPLI DE NOMS et N° des Articles du Cadastre de la commune.		BUREAUX ÉTRANGERS ou DES FAITS RONT INSCRITS AU ROS DES NOMS PERSONNES	
NOM	PRENOMS	PROFESSION	DEMEURE	ARTICLES DU CADASTRE.	NOM DE LA COMMUNE.	ARTICLES DU CADASTRE.	
Dupont	Jean	Industriel	Iselles	109	—	—	—
Durand	Joseph	Arvocat	Liège	1778	Quinyghem Hoeylaert	60 59, 68	néant
Lenoir	Alfred	Fermier	Terniers	1892	Kelles. Overynsche	44, 708 117.	Tilborde Anvers (Nord) Mabius Liège Herdal.

FICHE 2. **(28)**

Résumé d'article de la matrice cadastrale.
1° EMPHYTÉOSE, 2° NUE PROPRIÉTÉ, 3° INDIVISION
(Chaque article fait l'objet d'une fiche; biffer ci-dessus les cas qui ne se présentent pas.)

Commune : Falles Numéro de la fiche : _____
 Numéro de l'article : 75

Nom et prénoms : <u>Lebon Marie-Jean-Baptiste</u> <u>au propriétaire</u> <u>de blanc Marie-Louise</u> <u>(usufruitière)</u>	Profession : <u>termeur</u> <u>rentière</u>	Demeure : <u>Liège</u> <u>Gand</u>
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	Nombre de parcelles.	Contenance.			Revenu cadastral		
		H.	A.	C.	FR.	CENT.	
Parcelles {	a) bâties	2	0	1	15	805	40
	b) non bâties	13	15	20	18	2480	—
Total		15	15	21	33	2785	40

Imp. A. LAUREN, Bruxelles

No. 1.

FICHE 2^{BIS}.

Résumé d'article de la matrice cadastrale :
1° EMPHYTÉOSE, 2° NUE PROPRIÉTÉ, 3° INDIVISION
(Chaque article fait l'objet d'une fiche; biffer ci-dessus les cas qui ne se présentent pas.)

Commune : Falles Numéro de la fiche : _____
 Numéro de l'article : 75

Nom et prénoms : <u>Leblanc Marie-Louise</u> <u>(usufruitière)</u>	Profession : <u>rentière</u>	Demeure : <u>Gand</u>
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Lebon. —

Imp. A. LAUREN, Bruxelles

No. 2.

APPENDIX II

LARGE PROPRIETORS ENQUIRY

Size of Property (Acres).	Number of Proprietors.	Percentage of Total Number of Proprietors in Belgium.	Area (Acres).	Being per Cent of Total Area of Belgium.
61·77- 74·13	958	0·3440	67,385	1·12
74·13- 86·48	857	0·3070	71,400	0·99
86·48- 98·84	757	0·2710	72,356	1·01
98·84-123·5	1079	0·3870	124,967	1·74
123·5 -185·3	1771	0·6360	266,091	3·85
185·3 -247·1	1009	0·3620	218,395	3·14
247·1 -370·7	1188	0·4260	353,733	5·12
370·7 -494·2	571	0·2050	244,386	3·54
494·2 -741·3	692	0·2480	415,544	6·02
741·3 -988·4	392	0·1400	332,357	4·82
988·4 - 1,236	207	0·0740	225,373	3·26
1,236- 1,853	252	0·0901	391,074	5·66
1,853- 2,471	105	0·0377	219,948	3·18
2,471- 3,707	81	0·0291	242,426	3·52
3,707- 4,942	38	0·0136	157,803	2·28
4,942- 6,178	14	0·0050	86,301	1·25
6,178- 7,413	2	0·0007	13,743	0·19
7,413- 8,649	4	0·0014	30,707	0·44
8,649- 9,885	3	0·0010	28,073	0·41
9,885-12,356	2	0·0007	22,444	0·33
Over 12,356	2	0·0007	29,700	0·43
	9984	3·5800	3,614,206	52·30

The total number of *Articles des Rôles Fonciers* (see p. 38) owned wholly or in part by the above 9984 proprietors is 68,575.

TWENTY-EIGHT COMMUNES ENQUIRY
NUMBER OF PROPRIETORS, AND SIZE OF THEIR HOLDINGS

Size of Property (Acres).	Land covered with Buildings.		Land without Buildings.		Land with some Buildings.		Total Number of Proprietors.	Total Area (Acres).
	Number of Proprietors.	Area (Acres).	Number of Proprietors.	Area (Acres).	Number of Proprietors.	Area (Acres).		
Under 0·12	820	40·01	277	14·72	576	45·94	1673	100·67
0·12- 0·24	45	6·71	257	46·68	832	148·44	1134	201·83
0·24- 0·37	4	1·28	189	57·06	538	172·90	731	231·24
0·37- 0·49	3	1·32	155	66·19	358	153·38	516	220·89
0·49- 0·61	1	·50	156	85·95	281	159·56	438	246·01
0·61- 0·74	137	93·12	213	143·01	350	236·13
0·74- 0·86	112	88·42	202	160·05	314	248·47
0·86- 0·98	110	102·50	175	163·02	285	265·52
0·98- 1·11	1	1·01	86	90·15	149	157·58	238	248·74
1·11- 1·23	85	92·87	135	164·99	220	257·86
1·23- 1·35	91	117·32	144	186·48	235	303·80
1·35- 1·60	140	204·76	259	321·10	399	525·86
1·60- 1·85	1	1·64	86	148·69	209	365·56	296	515·89
1·85- 2·47	213	464·36	503	1074·45	716	1538·81
2·47- 4·94	369	1262·17	1103	3976·70	1472	5238·87
4·94- 7·41	218	1343·68	638	3902·60	856	5246·28
7·41- 9·88	107	829·92	468	4075·50	575	4905·42
9·88-12·35	81	916·37	320	3556·80	401	4473·17
12·35-14·82	42	568·10	272	3680·30	314	4248·40
14·82-17·29	34	553·28	191	3038·10	225	3591·38
17·29-19·76	31	568·00	176	3235·70	207	3803·70
19·76-22·23	25	528·58	147	3112·20	172	3640·78
22·23-24·71	22	526·11	126	2914·60	148	3440·71
24·71-27·18	17	449·54	104	2710·70	121	3160·24
27·18-29·65	12	353·21	102	2939·30	114	3292·51
29·65-32·12	14	437·19	92	2791·10	106	3228·29
32·12-34·59	18	610·09	76	2494·70	94	3104·79
34·59-37·06	8	286·52	63	2215·59	71	2502·11
37·06-39·53	9	340·86	64	2457·65	73	2798·51
39·53-42·00	8	330·98	74	3013·40	82	3344·38
42·00-44·47	2	86·94	56	2413·19	58	2500·13
44·47-46·95	6	269·23	52	2383·55	58	2652·78
46·95-49·42	6	291·46	54	2593·50	60	2884·96
49·42-51·89	2	100·77	34	1719·12	36	1819·89
51·89-54·36	1	54·34	34	1808·04	35	1862·38
54·36-56·83	3	166·23	33	1835·21	36	2001·44
56·83-59·30	3	172·50	35	2053·50	38	2226·00
59·30-61·77	6	358·15	29	1756·97	35	2115·12
Over 61·77	24	1684·54	362	41,249·00	386	42,933·54
Totals	875	52·47	3162	14,761·55	9279	111,343·48	13,316	126,157·50

The total number of *Articles des Rôles Fonciers* (see p. 38) owned wholly or in part by the above 13,316 proprietors was about 31,000.

APPENDIX III

LAWS AFFECTING SUCCESSION, INHERITANCE, AND TRANSFER

THE law of April 27, 1865, gave to foreigners all the rights of acquiring or disposing of property possessed by Belgian citizens.

The law passed on November 20, 1896, instituted a system more favourable to the survivor of a marriage, whether widower or widow, in case of any one dying intestate.

The law of May 16, 1900, was passed with the purpose of keeping small rural properties from being divided.

According to the Code Napoleon, on the death of a property-owner, his estate must be divided amongst his heirs; but the 1900 law gives the widow or widower, as the case may be, a preferential right to purchase at a valuation the estate which he or she held jointly with the deceased, a cash payment being made, of course, to each of the heirs, equal in amount to the value of that portion of the estate which would have been given to him had the estate been divided.

It must, however, be noted that this law applies only to the house in which the deceased or one of his descendants actually lived and the farm which he actually farmed himself. It does not apply to any property which is let to tenants. In case the widow or widower does not wish to retain the property intact, this may be done by one of the other heirs. If more than one of the heirs wish to retain the property the matter is decided by lot. If the members of the family do not agree upon the valuation of the property, it is made by a magistrate (*juge de paix*).

APPENDIX IV

SYSTEMS OF LAND REGISTRATION IN VARIOUS COUNTRIES

It will be interesting to see how the Belgian system of Land Transfer compares with those found in other countries. Systems of land registration may be classified under two heads, according as they provide for registration of deeds or registration of titles. It is the former system—registration of deeds—which obtains in Belgium.

Registration of deeds is obviously the easiest system to set on foot in the first instance, and consequently it appears in most cases as the first stage. Some countries have not passed beyond this stage; others are grafting on it a growing system of registration of title; in others, again, registration of title has wholly superseded its forerunner.

In Europe, countries with registration of deeds fall into two groups. The first comprises those with systems influenced by, or analogous to, that of French law; in addition to Belgium there are, in this group, France, Greece, Holland, Italy, Portugal,¹ Spain, and sixteen cantons of Switzerland. The second is the Scandinavian group—Denmark, Norway, and Sweden; in these registration of deeds has some special features, which bring it rather nearer to registration of title. The European states with registration of title are Austria, Hungary, the German Empire, eight cantons of Switzerland, Russia (following the Prussian example), and Turkey. We should add that in Ireland, Scotland, Man, the Channel Islands, Malta, and Gibraltar, registration of deeds is in force; in Ireland registration of title is also established as a concurrent system, to which the growing mass of land dealt with under the Land Purchase Acts becomes subject.

Outside Europe all the civilised states founded by Europeans seem to have set up compulsory registration of deeds;¹ and this system still governs land transfer in most of the United States and the provinces of Canada, as well as under the Roman-Dutch law of South Africa, in British India, and throughout a host of smaller European dependencies. In Australasia it has largely been superseded by the Torrens system of registration of title, which first took shape in a South Australian statute of 1858.

The Torrens system is now in force in all the Australasian colonies, in Fiji, in a few of the United States of America, and in the Canadian provinces of Manitoba and the North-Western Territories. In these countries it applies only to "land brought under the system," while land not yet so brought is transferred by registration of deeds; in Australasia, however, the latter system is decidedly the declining one. Registration of title also obtains in the Leeward Islands, in Trinidad, in Tobago, and in Labuan. British North Borneo appears to be the single instance in which (after a two years' experiment) registration of title was abandoned in favour of registration of deeds.

¹ Some of the states of Latin America, *e.g.* Brazil and Argentina, still register deeds of mortgage only, and not deeds of sale. Registration of deeds has usually been started in this limited way, *e.g.* under the Code Napoleon; the initial idea being to provide an easy method of determining priority as between mortgagees.

APPENDIX V

PREDOMINANT WAGES IN THE BUILDING TRADE (1908)

Town.	Bricklayers.			Joiners and Carpenters.			Plumbers.			Plasterers.			Painters.			Bricklayers' Labourers.			
	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	
	d.	s.	d.	d.	s.	d.	d.	s.	d.	d.	s.	d.	d.	s.	d.	d.	s.	d.	
Walloon. Flemish.	Charleroi	4½	63	25 3	63	25 3	4½	63	25 3	4½	63	25 3	5½	63	31 10	3½	63	20 2	
	Liège	4½	63	22 8½	63	22 8½	4½	63	21 11	4½	63	21 11	4½	63	21 11	3½	63	14 1½	
	Verviers	4½	63	22 8½	63	22 8½	4½	63	25 3	4	63	21 2	4½	63	20 3	3½	63	16 1½	
	Tournai	3½	63	17 8	3½	63	16 1½
	Brussels	4½	57	22 10	57	20 6	4½	57	20 6	4½	57	20 6	4½	57	20 6	3½	57	17 1½	
	Antwerp	4½	66	24 10	66	24 3	4½	66	24 3	4½	66	25 5	4½	66	25 1	3½	66	16 1½	
	Ghent	4½	63	21 11	63	20 8	4½	63	20 8	4	63	20 3	4	63	20 8	3½	63	16 1½	
	Alost	3½	69	19 4	69	19 4	3½	69	19 4	3½	69	19 4	3½	69	17 9	2½	69	12 2	
	Renaix	3½	69	19 4	69	19 4	3½	69	19 4	3½	69	19 4	3½	69	17 9	2½	69	12 2	
	Roulers	3½	72	19 0	72	19 0	3½	72	19 0	3½	72	19 0	3½	72	19 0	2½	72	14 5	
St. Nicolas	3½	63	17 8	63	15 1	2½	63	15 1	3½	63	20 2	3½	63	16 1½	2½	63	12 7		
London *	10½	50	43 9	50	45 10	11	50	45 10	11	50	45 10	8½	50	35 5	7	50	29 2		
Manchester *	10	54½	45 5	49½	39 2½	9½	49½	39 2½	10	52	43 4	9	52	39 0	6	54½	25 7		
Birmingham *	9½	54	42 9	54	42 9	9½	54	42 9	10	54	45 0	8½	56½	40 0	6½	54	29 3		
Leeds *	9½	49½	37 1½	49½	37 1½	9	49½	37 1½	9½	49½	39 2½	8	50	33 4	6½	49½	26 9½		
York †	9	53	36 5½	53	35 4	8	53	35 4	9	53	38 11	7½	49½	30 11½	6	53	26 6		
Exeter †	8	53½	33 5½	53	35 0	7½	53	35 0	7½	53	38 11	6½	53	29 0	5	53½	22 3½		
Accrington †	9	49	36 9	49	34 8½	9	49	34 8½	9	49	36 9	8	54	36 0	5½	49	22 5½		
Lincoln †	8	55½	41 7½	55½	41 7½	8	55½	41 7½	9	55½	41 7½	7½	53	33 1½	5	53	22 1		
Selby †	9	56½	35 3½	56½	37 8	8	56½	37 8	8	56½	40 0	6½	56½	30 7½	6	56½	27 9		
Ashford †	7½	56½	35 3½	56½	37 8	8	56½	37 8	8½	56½	40 0	6½	56½	30 7½	5	56½	23 6½		
Northwich †	9	54½	40 10½	54½	36 4	8	54½	36 4	9	54½	40 10½	7½	54½	34 0½	...	...	...

The wages given for English towns are taken from the Board of Trade Reports on "Standard Time Rates of Wages"; the towns selected being typical of large towns (*), medium-sized towns (†), and small towns (‡). The wages for the large towns are those paid in 1908 (Cd. 4413), and the others those paid in 1906 (Cd. 3245); but from a comparison of the wages paid in large towns in these two years it appears that no important changes have taken place during that period.

PREDOMINANT WAGES IN THE ENGINEERING TRADES (1908)

Town.	Fitters.			Turners.			Smiths.			Patternmakers.			Labourers. ¹		
	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.
Walloon.	d.	s.	d.	d.	s.	d.	d.	s.	d.	d.	s.	d.	d.	s.	d.
	5½	27	6	5½	29	9	5½	29	9	5½	28	10	3½	62	16
	5	25	1	5½	25	11	4½	25	9	3½	19	11	3½	57	16
	3½	19	1½	3½	19	1½	4	20	8	3½	19	11	3½	63	14
	4½	20	11½	5½	24	5	4½	20	6	4½	20	6	4½	57	13
	4½	25	6	5	25	11½	4½	20	6	4½	20	6	4½	66	17
	4½	22	4	5	25	11½	4½	20	6	4½	20	6	4½	60	13
	3½	19	10	4½	22	2½	3½	19	10	3½	19	10	3½	62	11
	4½	22	2	4½	22	2	3½	19	10	3½	19	10	3½	66	16
	4½	22	2	4½	22	2	3½	19	10	3½	19	10	3½	66	16
Flemish.	8½	54	40	8½	54	40	8½	54	40	8½	54	44	5½	54	24
	8½	53	38	8½	53	38	8½	53	38	8½	53	42	4-5	53	18
	8½	53	36	8½	53	36	8½	53	36	8½	53	38	4-5	53	19
	8½	53	37	8½	53	37	8½	53	37	8½	53	39	4-5	53	19
	8½	53	32	8½	53	32	8½	53	32	8½	53	36	4½	53	20
	7½	53	33	7½	53	33	7½	53	33	7½	53	34	...	...	...
	7½	53	32	7½	53	32	7½	53	32	7½	53	34	...	...	...
	7½	54	32	7½	54	32	7½	54	32	7½	54	34	4-5	54	18
	6½	54	28	6½	54	28	6½	54	30	6½	54	32	...	...	...
	7½	54	34	7½	54	34	7½	54	36	7½	54	36	...	...	...
Walloon.	7½	54	32	7½	54	32	7½	54	30	7½	54	34	...	...	...
	7½	54	33	7½	54	33	7½	54	35	7½	54	35	...	...	...
	7½	54	33	7½	54	33	7½	54	35	7½	54	35	...	...	...
	7½	54	33	7½	54	33	7½	54	35	7½	54	35	...	...	...
	7½	54	33	7½	54	33	7½	54	35	7½	54	35	...	...	...
	7½	54	33	7½	54	33	7½	54	35	7½	54	35	...	...	...
	7½	54	33	7½	54	33	7½	54	35	7½	54	35	...	...	...
	7½	54	33	7½	54	33	7½	54	35	7½	54	35	...	...	...
	7½	54	33	7½	54	33	7½	54	35	7½	54	35	...	...	...
	7½	54	33	7½	54	33	7½	54	35	7½	54	35	...	...	...

The wages given for English towns are taken from the Board of Trade Reports on "Standard Time Rates of Wages"; the towns selected being typical of large towns (*), medium-sized towns (†), and small towns (‡). The wages for the towns marked \$ are those paid in 1908 (Cd. 4413), and the others those paid in 1906 (Cd. 3245); from a comparison of the wages paid in 1906 and 1908 it appears that no important changes have taken place during that period.

¹ The wages for labourers in England are taken from the Board of Trade Report on "Standard Rates of Wages" (Cd. 3864, 1908), p. 612.

PREDOMINANT WAGES PAID TO ADULT WORKERS IN THE COTTON TRADE IN BELGIUM AND IN LANCASHIRE IN 1909

Women

	Bobbin Winders.			Weft Winders.			Reelers.			Weavers (2 looms).			Weavers (4 looms).			Roving-frame Tenters.		
	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.
Ghent.	2½	58½	13 1	d.	2½	58½	a. d.	64½	13 8	d.	69	a. d.	2½	64½	16 0	d.	64½	16 0
Renaix.	2½	63	11 2	2½	63	12 4	2½	63	14 5	2½	69	14 5	2½	69	16 0	2½	66	11 1
Ardoye.	2½	69	11 11	2½	69	12 8	2½	66	11 1	2½	66	11 1	2½	66	11 1	2½	66	11 1
Aloust.	3½	55½	15 6	3½	55½	15 6	3½	55½	15 0	3½	55½	15 0	3½	55½	21 0	3½	55½	20 0
Bolton.	3½	55½	15 6	3½	55½	17 6	3½	55½	16 0	3½	55½	16 0	3½	55½	22 6	3½	55½	20 0
Oldham.	3½	55½	15 6	3½	55½	15 0	3½	55½	16 0	3½	55½	16 0	3½	55½	22 6	3½	55½	20 0
Manchester.	3½	55½	15 0	3½	55½	15 0	3½	55½	16 0	3½	55½	16 0	3½	55½	22 6	3½	55½	19 4

Men

	Warpers.			Weavers (2 looms).			Weavers (4 looms). ¹			Scutchers.			Grinders.			Spinners.			Piecers.			General Labourers.		
	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.	Per Hour.	Hours per Week.	Per Week.
Ghent.	d.	68	10 4	d.	3½	16 2	d.	58½	20 2	d.	64½	17 7	d.	64½	17 1	d.	64½	28 8	d.	64½	16 7	d.	64½	15 2
Renaix.	1½	68	10 4	3½	16 2	2½	66	2½	16 0	2½	66	12 8	2½	66	12 8	2½	66	22 10	2½	66	16 7	2½	66	12 3
Ardoye.	1½	68	10 4	3½	16 2	2½	66	2½	16 0	2½	66	12 8	2½	66	12 8	2½	66	22 10	2½	66	16 7	2½	66	12 3
Aloust.	1½	68	10 4	3½	16 2	2½	66	2½	16 0	2½	66	12 8	2½	66	12 8	2½	66	22 10	2½	66	16 7	2½	66	12 3
Bolton.	8	55½	37 0	5½	25 0	5½	25 0	5½	25 0	5½	25 0	5½	25 0	5½	25 0	5½	25 0	50 0	5½	25 0	18 6	5½	25 0	21 0
Oldham.	9	55½	42 6	5½	24 0	5½	24 0	5½	24 0	5½	24 0	5½	24 0	5½	24 0	5½	24 0	50 0	5½	24 0	18 6	5½	24 0	21 0
Manchester.	8	55½	37 0	5½	24 0	5½	24 0	5½	24 0	5½	24 0	5½	24 0	5½	24 0	5½	24 0	50 0	5½	24 0	18 6	5½	24 0	20 0

¹ Although there is no difference in the piece rates paid to men and women in Lancashire, in practice men often earn a little more.

PREDOMINANT WAGES PAID TO ADULT WORKERS IN THE WOOLLEN AND WORSTED INDUSTRIES IN VERVIERS, 1909

Woollen Weaving

	Winder. Woman.	Cleaner. Woman.	Knotter. Woman.	Warper. Man.	Sizer. Man.	Weaver (1 loom). Man.	Weaver (2 looms). Man.	General Labourer. Man.
Per hour . . .	2 $\frac{3}{4}$ d. 67 $\frac{1}{2}$	2 $\frac{1}{4}$ d. 67 $\frac{1}{2}$	2 $\frac{1}{4}$ d. 67 $\frac{1}{2}$	4 $\frac{1}{4}$ d. 67 $\frac{1}{2}$	4 $\frac{3}{4}$ d. 67 $\frac{1}{2}$	4 $\frac{1}{4}$ d. 67 $\frac{1}{2}$	5 $\frac{1}{4}$ d. 61 $\frac{1}{2}$	3d. 67 $\frac{1}{2}$
Hours per week . .	14s. 10d.	14s. 4d.	14s. 4d.	23s. 8d.	26s. 2d.	23s. 8d.	27s. 7d.	16s. 9d.
Per week . . .								

Wool Spinning

Men.								
	Carder.	Scribbler (day).	Scribbler (night).	Spinner (day).	Spinner (night).	Doubler.	Piecer.	Labourer.
Per hour . . .	3 $\frac{1}{4}$ d. 62	3 $\frac{1}{4}$ d. 63	4 $\frac{1}{4}$ d. 62	4 $\frac{1}{4}$ d. 62	4 $\frac{1}{4}$ d. 62	4 $\frac{1}{4}$ d. 62	3 $\frac{1}{4}$ d. 62	3d. 62
Hours per week . .	19s. 10d.	19s. 10d.	21s. 7d.	22s. 4d.	23s. 7d.	25s. 4d.	16s. 4d.	15s. 4d.
Per week . . .								

Worsted Spinning

	Bobbin Winder (day). Woman.	Bobbin Winder (night). Woman.	Doubler. Woman.	Doubler. Man.	Spinner. Man.	Piecer. Man.
Per hour . . .	2d. 62	2 $\frac{3}{4}$ d. 62	2 $\frac{3}{4}$ d. 62	4 $\frac{1}{4}$ d. 62	5 $\frac{3}{4}$ d. 62	4d. 62
Hours per week . .	10s. 4d.	14s. 1d.	13s. 5d.	21s. 11d.	30s.	20s. 10d.
Per week . . .						

WAGES OF RAILWAY WORKERS

Grade.	Number of Workmen in Belgium.	Average Rate.		Predominant Rate.	
		Belgium (1908).	An English Company (1909).	Belgium (1908).	An English Company (1909).
		s. d.	s. d.	s. d.	s. d.
Engine-drivers . . .	3598	27 2	43 1	25 10	45 0
Firemen . . .	3539	19 5	27 2 $\frac{3}{4}$	16 8	30 0
Locomotive cleaners	1294	15 8	14 2	12 6	18 0
Platelayers . . .	4445	16 0	21 4 $\frac{1}{2}$	14 6	22 0
Carriage cleaners	756	16 0	19 3 $\frac{1}{2}$	13 6	19 0
Loaders	2762	16 10	24 4 $\frac{3}{4}$	14 3	24 0
Guards	2013	23 0	29 7	{ 21 8 and 23 0 13 6 and 14 5 14 4 and 15 4 }	30 0
Level crossing attendants	1473	16 2	18 10 $\frac{3}{4}$	{ 13 6 and 14 5 14 4 and 15 4 }	18 0
Signalmen	985	18 3	27 3 $\frac{3}{4}$	{ 14 4 and 15 4 }	26 0
Joiners and carpenters	1080	17 4	29 5	18 0	28 0
Blacksmiths	655	18 7	28 10 $\frac{1}{2}$	18 0	29 0
Boilermakers	688	17 7	32 1 $\frac{1}{2}$	18 0	36 0
Turners	539	18 3	28 7 $\frac{1}{2}$	22 4	33 0
Fitters	3830	17 9	29 8 $\frac{3}{4}$	18 0	30 4
Labourers	{ 1607 3767	17 10	19 6 $\frac{1}{2}$	15 4	19 0
		(Exploitation)	(Shop)		
		14 10	19 10 $\frac{3}{4}$	12 6	19 0
		(Traction)	(Shed)		

APPENDIX VI

IN the following table the Trade Unionists are analysed according to the party to which they belong and the industries from which they are recruited. The figures for the Catholic unions have been taken from the last report of the Rev. Father Rutten, published in 1909; those for the Socialist and allied societies from the report of the Trade Union Committee of the Labour Party for the year 1907. The distinction between Socialist and Militant, Liberal and Neutral Trade Unions is somewhat arbitrary, and certain corrections have been introduced when the grouping was obviously misleading.

BELGIAN TRADE UNIONS¹

Industry.	Socialist and Militant. ²	Catholic.	Liberal.	Neutral.	Other Unions (Number of Unions).	Approximate Number of Women Unionists. ⁴
	1907.	1909.	1907.	1907.	1907.	
Food	711	... ³	...	2350	9	...
Building	6,917	2696	...	...	13	...
Wood	3,991	2352	345	520	11	30
Coachmakers	389	...	...	...	1	...
Bootmaking	1,180	1247	...	...	...	60
Hides and skins	1,737	... ³	...	...	...	...
Printing and book-binding	5,673	410	...	200	5	600
Metal	16,087	4043	150	297	6	30
Diamonds . . . . .	...	...	...	4200	...	...
Miners	53,000	4292	...	30	1	300
Mixed and miscellaneous	2,067	4963	...	800	...	1000
Brick makers, navvies, and paviors	10,100	3360	...	...	1	...
Tobacco	2,606	... ³	...	60	...	276
Textile	24,315	9140	500	140	...	7500
Transport	5,588	754	25	70	...	...
Glass	7,419	...	...	...	10	20
Clothing	255	1183	...	...	...	60
Railway . . . . .	...	4940	...	3000	...	...
Other women . . . . .	...	641	...	...	...	641
Total	142,035	40,521	1020	11,667	57	10,517
Analysis.						
Socialist and militant				142,035		Per cent. 71·7
Catholic				40,521		20·5
Liberal				1,020		0·5
Neutral				11,667		5·9
Others (57, with an estimated membership of 50 each)				2,850		1·4
Total				198,093		100·0

¹ The figures here given are as accurate as can be obtained, but the statistics furnished by some Unions are very unsatisfactory, partly because the number of their members varies so greatly (see footnote, p. 100).

² This includes all Unions which definitely accept the principle of war between the classes.

³ The numbers in these Unions are included among "mixed and miscellaneous."

⁴ Included in previous columns.

APPENDIX VII

THE NUMBER OF HOLDINGS OF VARIOUS SIZES¹

Size of Holding.	1846.		1895.		Increase or Decrease per cent (1895 over 1846).	1901.	1902.	1903.	1904.	1905.	1906.	Increase or Decrease per cent (1906 over 1901).
	Number.	Per-centage.	Number.	Per-centage.								
1½ acres and less	247,551	43·32	458,120	55·23	+ 12·01	?	?	?	?	?	?	...
1½ to 2½	70,413	12·33	85,921	10·36	- 1·97	(8,812)	(9,489)	(9,863)	(10,356)	(10,064)	(10,305)	+ 0·29
2½ " 5	82,550	14·25	90,312	10·89	- 3·27	80,160	84,425	87,287	89,760	90,276	90,630	+ 1·58
5 " 7½	42,355	7·43	50,576	6·10	- 1·33	49,055	50,040	50,397	51,031	51,463	51,352	- 0·41
7½ " 10	24,329	4·25	30,732	3·70	- 0·55	30,137	30,537	30,754	31,001	31,135	31,499	- 0·27
10 " 12½	16,699	2·94	20,213	2·44	- 0·50	20,157	20,369	20,615	20,859	20,971	21,176	- 0·14
12½ " 25	42,737	7·59	49,065	5·91	- 1·68	49,298	50,155	50,420	50,921	51,499	51,856	- 0·34
25 " 50	26,585	4·65	28,151	3·39	- 1·26	26,245	26,599	26,658	26,715	26,877	26,983	- 0·38
50 " 75	9,056	1·58	8,163	0·98	- 0·60	6,937	7,040	7,153	7,024	7,122	7,038	- 0·14
75 " 100	3,881	0·54	3,187	0·38	- 0·16	2,653	2,671	2,661	2,640	2,626	2,655	- 0·07
100 " 125	2,061	0·36	1,601	0·19	- 0·04	1,376	1,390	1,351	1,340	1,335	1,410	- 0·03
125 " 250	4,333	0·76	2,661	0·32	- 0·33	2,354	2,370	2,360	2,376	2,392	2,321	- 0·07
250 " 375			923	0·11		451	449	452	443	446	433	433	- 0·01
More than 375	...	...	...	...	...	110	111	117	102	108	110	...
Total	572,550	100·00	829,625	100·00	...	277,754	285,645	290,094	294,568	296,314	297,768	...

¹ Holdings of less than 2½ acres are not included in the annual agricultural returns. The figures given in brackets refer to the number of holdings of "about 2½ acres."
In this table 1 hectare has been taken as being equal to 2½ acres. It actually measures 2·471 acres.

APPENDIX VIII

THE principal clauses of a typical agreement made with one of the largest landowners in Flanders,¹ together with the remarks on them by an English solicitor who has had much experience in matters affecting agricultural leases.

Terms.—The rent is payable each year, at the residence of the owner or his representative, on the pay day or during the following month, *i.e.* either on the 1st October or 24th December, in current gold or silver coin only.

Interest at the rate of 4 per cent will be charged from the date on which payment is due in case of payment not being effected within three months from this date.

(It is not usual in England for any interest to be paid on rent in arrear.)

Surrender.—The contracting parties have the right to discontinue the lease each year, written notice being given at least one year in advance by registered letter.

(This is the usual provision in an English lease, but the notice is generally specified to expire only on the day of entry.)

Sub-lease.—The property leased must not be sub-let, either in whole or in part, without the written consent of the owner; except to labourers on the farm, to whom allotments may be let.

(This is a usual clause.)

Shooting.—Shooting rights remain exclusively with the owner or with persons authorised by him.

(This is not unusual, subject to the provisions of the Ground Game Acts.)

Breach of Contract.—In case of non-fulfilment of the terms stipulated, and especially of the non-payment of rent exactly on the date and in the manner agreed, the present agreement is cancelled by this very fact, at the pleasure of the owner, and the tenant is held to leave and to return the farm and lands in good condition, either to the owner or to the new tenant, without being allowed to claim the tacit renewal of the lease, and without being allowed to have recourse to special means designed to retard the enforcement of this clause.

(This clause is a good deal stronger than is usual in England. In English leases a clause is inserted which is very similar to this, but its effect has been much modified by legislation.)

Charges on the Tenant.—(a) All charges in connection with this agreement. (b) All taxes on the property let (except land-tax) which are in force at the time of letting or may be levied in the future.

¹ *Monographie agricole de la région sablonneuse des Flandres*, Brussels, 1900, p. 135.

((a) It is not usual in the north of England for an agricultural tenant to pay for the lease and stamp; the landlords of large estates nearly always have printed forms which are provided free of charge to the tenants. (b) This provision is the same in England (tithe rent charge and landlord's property tax are excepted).)

Maintenance.—The tenant is held, in respect of the properties rented consisting of land and buildings:—

(a) To care for their proper maintenance, good cultivation, good manuring, good plantation, and all other needful operations. After land has been well manured with dung, two successive crops may be taken from it, but if more are desired it must be manured again.

(b) To keep the land and roads free from dog's-grass, thistles, nettles, and other injurious plants.

(c) Not to apply any injurious substance to the soil.

(d) To make all necessary improvements in the property; but these must not, without the written authority of the owner, be such as to alter the uses to which it can be put.

(e) Once every three years to whitewash the walls and to paint with two coats of oil the doors, window casements, and shutters of the house, and to tar the doors and door-frames of the stables, of the barns, and all other out-buildings of the farm.

(f) In addition, to keep in good condition everything that falls to his charge in accordance with the law or local custom, especially the thatched roofs and pumps.

((a) (b) (c) (d) and (e) are usual clauses in England. (In the north of England the landlord generally supplies the paint and the tenant puts it on.)

(f) This is rather stronger than is usual in England, where it is usual for the landlord to keep the farmhouse wind- and water-tight and to repair main walls and main timbers.)

Plantations.—At the expiration of the lease, or in the case of breach of contract, the tenant has no right to claim any compensation for plantations, alterations, or improvements. These shall revert absolutely to the landlord. The latter has also the right to make new plantations either around or upon the property, and to cut down or to prune such forest and all other trees as may be convenient to himself without any right to compensation on the part of the tenant.

(This provision is not included in English leases; but in English leases the landlord generally has the sole right of cutting, pruning, etc., timber trees.)

Repairs.—The owner may make such repairs or structural alterations in the buildings as he thinks fit. The tenant is held to fetch gratis from the places indicated to him the necessary materials. The labourers and artisans employed on these works are to be fed at his charge.

(It is not unusual in England for the owner to provide the material for repairs asked for by the tenant and agreed to by the owner,

and the tenant to actually execute the repairs, but the Flemish clause appears to go further, as it provides for structural alterations to be made at the owner's option without in any way consulting the tenant, and the tenant has to feed the workmen engaged on the work.)

Damages.—All losses resulting from frost, hail, inundation, lightning, and all other unforeseen accidents fall to the tenant.

(In English leases the loss occasioned to the structure of the house by fire and tempest generally falls on the landlord and not on the tenant as in the Flemish lease. The loss to crops and stock is borne by the tenant.)

Insurance.—All buildings are to be duly insured against fire by the tenant; also his furniture, his cattle, and his crops. The tenant shall authorise the owner to claim in his name from the insurance company all sums which may be due from the tenant to the owner, whether for payment of rent or otherwise.

(The insurance of the buildings in North country leases falls on the landlord; in the South country it is usual for the insurance to be paid by the tenant.)

Expiration of Lease—Special Clauses.—(a) At the expiration of the lease the tenant must not apply any fertiliser or other manure to the fields except under the supervision of an expert to be appointed by the owner. In the last year of his tenancy he has to leave free for spring crops the same area as in previous years, all this under penalty of losing his claim to compensation.

(b) If the farmer surrenders the land in whole or in part, either on the expiration of the lease or for other reasons, he must place it at the disposal of the owner or of the new tenant as soon as the harvest has been gathered. He has a claim on this account to the third of his rent for the last year of his tenancy.

(c) In the case of the tenant leaving the farm—whether voluntarily or for other reasons—without having completely paid his rent, the estimated value of improvements is to be paid for by the new tenant to the owner in payment of the arrears.

(These clauses do not differ very greatly from the provisions for an away-going crop usual in an English lease. The Agricultural Holdings Acts so largely govern the question of away-going that it is difficult to draw comparisons.)

APPENDIX IX

EXTRACT FROM A LETTER RECEIVED FROM M. N. I. CRAHAY, CHIEF INSPECTOR OF WATERS AND FORESTS, DATED BRUSSELS, SEPTEMBER 12, 1908.

“ You have asked me what is, according to our statistics, the number of men employed in our forests. It is very difficult to answer definitely, and I can only give you a few general considerations on this subject.

“ According to the statistics of wages submitted to the Forestry Department in 1905, £155,770 was the value of the timber sold standing. If we apply this figure to privately-owned woods, which in round figures are about one-and-a-half times as extensive as the woods under government management, we arrive at £233,655 as the value of the timber sold by private persons, and at £389,425 as the total value of timber sold in that year in Belgium. If we estimate the cost incurred in connection with the felling of timber at 60 per cent of the value of the timber sold standing, we see that in one year £233,654 have been spent under that heading.

“ The products of clearing, thinning, etc., were sold standing for £22,302. Those of the private owners represent about £33,452, which with the sum just named makes a total of £55,754. The cost of labour in this case is higher and must be estimated at 100 per cent of the value of the products. The wages on this account, therefore, represent £55,754.

“ The value of timber used by the owners (either private individuals or having common rights) is estimated at £43,947, and as this is chiefly firewood a considerable amount of labour is involved in connection with it. One may estimate this at a 100 per cent of the value of the product, so that the wages paid on this account may be estimated at £43,947.

“ The total wages bill for the felling of timber (including thinning) in the Belgian forests, therefore, runs to :—

£233,654
55,754
43,947
<hr style="width: 100px; margin: 0 auto;"/>
£333,355

To this must be added the cost of labour in connection with improvements effected in the forests, which amounted in 1905 to £19,214 in the woods managed by this department, and which may be estimated

at at least £28,000 for the privately managed woods, as these are maintained at a greater expense than the communal woods. We have therefore to add :—

£19,214
28,000
<hr style="width: 100%; border: 0.5px solid black;"/>
£47,214

which gives in round figures a total payment in wages of £400,000.

“One should further add the labour involved in connection with sport, for the creation and maintenance of the nursery gardens for young trees, and the wages of part of the staff of foresters who sometimes are employed in manual labour ; but all this is difficult to estimate in figures.

“The woodcutters work in the woods only part of the year, during winter and spring. A small number, about one-tenth, work all the year round ; nine-tenths work on the average for about four months in the woods. By estimating their wages on the average at two shillings per day, you will have no difficulty in finding the number of workers engaged in occupations connected with the woods. No account has been taken in this calculation of the workers engaged in the saw-mills, the manufacture of sabots, distilleries, home industries, etc., and in the private and commercial nursery gardens.”

APPENDIX X

TIMBER YIELD OF 166 PINE WOODS IN BELGIUM AND OF PINE WOODS IN GERMANY AND RUSSIA¹
IN CUBIC YARDS PER ACRE

Class	BELGIUM.												GERMANY.					RUSSIA.			
	Centre.			Ardennes, Condroz, etc.			Low Campine.			High Campine.			Black Forest.		North German Low Plain.			Government, St. Petersburg.			
	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	III.	V.	I.	III.	I.	III.	V.	
Number of woods	5	7	9	10	20	28	10	16	22	14	19	6	...	...	...	...	...	...	...	...
Age, years : 20	94	65	44	49	43	29	52	35	26	43	34	25	89	52	24	82	49	16	44	25	13
"	110	82	56	64	45	31	61	45	29	57	40	32	...	...	...	...	...	...	...	...	...
"	123	...	75	99	66	42	75	51	37	80	58	43	148	88	45	128	84	31	71	41	22
"	...	...	...	...	78	67	90	72	50	100	77	58	...	...	...	...	...	...	...	...	...
"	139	122	...	...	107	74	96	85	65	...	100	...	199	129	67	167	112	44	101	60	33
"	...	...	...	...	...	80	...	...	84	...	...	89	...	...	...	...	...	...	...	...	...
"	...	...	...	162	...	104	...	...	100	...	...	...	...	163	87	205	135	62	131	79	44
"	...	...	135	...	151	...	147	...	...	...	...	...	...	...	...	...	...	...	...	...	...
"	...	...	...	...	...	136	...	...	...	...	...	...	193	102	...	...	...	75	160	100	54

¹ The Classes I., III., V. in Germany and Russia are those corresponding to the Belgian classes of land I., II., and III.

TYPICAL INSTANCES OF THE YIELD OF BELGIAN PINE FORESTS

Situation of Forest.	Campine (near Antwerp).	Rochefort (bad soil).	Nassogne and Fays de Lucy (Ardennes).					
			A. ¹	B. ¹	C. ¹	D. ¹	E. ¹	F. Swampy soil.
Original value of land, per acre	£ s. 1 12	£ s. 3 5	£ s. 4 1	£ s. 4 1	£ s. 4 1	£ s. 4 1	£ s. 4 1	£ s. 1 12
Cost of drainage and planting per acre . .	3 5	2 8	3 5	3 5	3 5	3 5	3 5	4 1
Total cost	4 17	5 13	7 6	7 6	7 6	7 6	7 6	5 13
The same woods at the age of years	40	40	16	21	27	33	46	54
Retaining the original value of the land . . .	£ s. 1 12	£ s. 3 5	£ s. 4 1	£ s. 4 1	£ s. 4 1	£ s. 4 1	£ s. 4 1	£ s. 1 12
Have the added value of timber standing.	40 10	43 7	6 11	11 15	32 2	64 19	117 18	161 19
<i>I.e.</i> a total value of . .	42 2	46 12	10 12	15 16	36 3	69 0	121 19	163 12
The return on capital (compound interest) per cent	5.5	5.4	2.3	3.8	6.1	7.0	6.3	6.4

NOTE.—In all these cases the cost of upkeep is covered by the product of shooting rights and clearings from the tenth year.

¹ These instances show the rapid increase of the return on capital in the higher ages of the wood. The slight decrease in profit at the age of forty-six years would seem to be due to differences in the character of the plots selected for comparison, and is not typical of the general experience.

APPENDIX XI

THE AREA UNDER DIFFERENT CROPS AT DIFFERENT PERIODS

	Rye.	Oats.	Wheat.	Spelt.	Meslin.	Barley.	Buck-wheat.
1846	699,921	722,305	576,626	128,065	98,101	98,069	67,999
1856	723,962	541,347	660,394	139,414	102,285	110,130	60,517
1866	713,746	567,468	700,349	134,225	87,655	107,736	52,940
1880	685,771	616,230	681,552	129,710	63,543	119,010	32,564
1895	699,939	601,924	445,531	83,569	45,564	121,630	11,611
1900*	605,555	625,567	417,324	58,588	33,009	94,917	7,472
1901*	620,133	615,586	409,430	57,247	33,177	94,586	7,071
1902*	656,874	646,145	415,521	58,025	33,186	96,142	6,604
1903*	626,496	705,467	355,260	50,170	30,789	79,709	7,128
1904*	639,016	601,196	393,021	55,968	28,580	98,718	6,604
1905*	659,446	586,222	402,343	73,893	28,746	94,314	5,543
1906*	624,908	645,223	372,656	49,037	28,494	86,860	5,906

* These figures refer to holdings of $2\frac{1}{2}$ acres and more.

APPENDIX XII

TABLE SHOWING THE GREAT SUBDIVISION OF LAND IN COMMUNES WHERE EXCEPTIONALLY HIGH YIELDS ARE OBTAINED

	Wheat.		Oats.	Summer Barley.		Winter Barley.	Rye.		Pota- toes.	Carrots (as chief crop).	Carrots (as second crop).			Forage Beet.	Sugar Beet.	Pears.	Beans.
	Ortheek (near Louvain Clayey Soil)	Gontieux (near Philippeville, Condroz)	Neuve Eglise (near Ypres, Clayey Soil).	Middelbourg (near Beclou, Sandy Soil).	Leerbeek (near Brussels, Clayey Soil).	Neumaison (near Mons, Clayey Soil).	Grand Biard (near Brussels, Clayey Soil).	Mariskerke (near Ghent, Sandy Soil).	Andegem (near Termonde, Clayey Soil).	Lombartzyde (near Orléans, Folters).	Bereel (near Malines, Campine).	Arañe (near Ghent, Sandy Soil).	Messeleare (near Ghent, Clayey Soil).	St. Nicolas (Sandy Soil).	Oostkerke (near Dinnude Sandy Soil).	Zerklehem (near Bruges, Sandy Soil).	Henuyères (near Bogenes, Clayey Soil).
No. of acres under above crop . . .	74	89	378	2½	14-8	22½	131	260½	202½	9-9	107	183	47	37	12½	14-8	
Yield of above crop per acre in lbs. . .	3600	3100	4500	4000	3600	5000	3000	3000	62,000	61,000	31,000	31,000	108,000	46,500	4500	3600	
Total cultivated area of commune in acres . . .	578	1235	2816	968	877	1497	879	845	1099	447	914	259	8925	3649	1564	1983	
No. of holdings of 2½ acres and less . .	10	42	34	5	41	24	5	14	21	17	2	1	128	6	8	2	
2½ acres to 5 acres . .	6	26	24	14	8	10	46	24	60	20	41	7	84	2	38	7	
5 " " 10 " " . . .	5	12	16	9	8	16	10	9	34	18	16	6	51	18	14	12	
10 " " 12½ " " . . .	3	6	16	4	3	8	10	7	28	7	8	1	26	11	11	6	
12½ " " 17½ " " . . .	3	8	18	7	4	11	5	13	10	8	1	2	48	8	8	6	
17½ " " 24½ " " . . .	2	5	14	7	2	10	4	9	16	4	4	2	48	8	15	7	
24½ " " 37 " " . . .	1	2	28	2	2	5	1	13	8	4	4	8	48	1	18	2	
37 " " 49½ " " . . .	1	2	18	4	2	11	1	4	1	1	1	..	18	9	7	5	
49½ " " 74 " " . . .	3	1	10	4	4	5	..	..	..	..	..	..	4	8	2	4	
74 " " 100 " " . . .	2	1	4	..	1	1	2	..	..	..	..	..	1	7	8	4	
100 " " 123½ " " . .	..	1	2	..	1	..	..	..	..	..	..	..	..	11	2	3	
Over 123½ acres . . .	32	112	180	68	67	97	98	84	172	66	167	68	398	92	116	59	

APPENDIX XIII

NET IMPORTS AND EXPORTS IN FIVE QUINQUENNIAL PERIODS OF THE PRINCIPAL AGRICULTURAL PRODUCTS

	1881-1885		1886-1890		1891-1895		1896-1900		1901-1905	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
Livestock (Cattle, Sheep, Pigs)	Value . . . £ Number . . .	..	1,426,680 220,203	..	1,068,800 245,121	..	1,028,920 246,916	..	1,079,660 226,722	..
Horses	Value . . . £ Number . . .	0,540 1,651	2,380 1,463	..	.. 924	870,160	..	460,120	..	589,840
Meat	Value . . . £ Tons . . .	269,640 4,215	39,160 4,507	..	.. 4,126	607,720	263,240	..	30,240 4,630	..
Fish	Value . . . £ Tons . . .	332,800 23,837	409,760 33,114	..	648,960 37,379	..	560,880 36,390	..	789,640 43,784	..
Preserves	Value . . . £ Tons . . .	197,440 1,929	216,200 2,000	..	116,560 1,917	..	85,400 791	..	12,800	1,179
Cereals	Value . . . £ Tons . . .	6,895,240 763,717	7,195,760 877,602	..	7,911,960 1,226,323	..	9,824,640 1,633,681	..	12,486,000 1,950,775	..
Derivatives of Cereals	Value . . . £ Tons . . .	698,480 12,191	242,960 ..	..	224,720 732	..	..	169,960 30,045	..	384,860 38,666
Vegetables	Value . . . £ Tons . . .	65,373	15,636	129,960	..	277,000	352,200	..	..	228,040
Fruit	Value . . . £ Tons . . .	305,000	350,560	..	374,780	..	..	404,400	..	474,280
Eggs	Value . . . £ Number . . .	..	106,960	..	105,780	..	60,920	..	211,840	..
Butter and Cheese	Value . . . £ Tons . . .	10,030,000 699,000	29,721,000 995,920	..	36,873,000 613,720	..	22,041,000 583,760	..	66,057,000 773,240	..
Exotic Products	Value . . . £ Tons . . .	17,765 2,170,000	17,450 2,884,720	..	8,323 2,832,960	..	9,253 2,601,900	..	11,450 2,497,080	..
Raw Sugar	Value . . . £ Tons . . .	836,800 50,000	..	1,199,480 84,619	..	1,344,000 107,083	..	1,502,640 159,374	..	920,000 105,637
Refined Sugar	Value . . . £ Tons . . .	130,620 5,000	860,720 17,333	..	595,360 23,377	..	764,200 6,440	..	50,215 ..	41,952
Alcoholic Beverages	Value . . . £ Imp. Gallons . . .	20,640 187,920	19,520 114,320	..	42,000 226,754	..	166,640 2,766,170	..	..	284,080
Beer	Value . . . £ Imp. Gallons . . .	1,365,586 1,507,080	1,641,914 1,164,480	..	1,425,314 600,440	..	1,089,080 68,134	..	3,376,760	..
Industrial Crops	Value . . . £ Tons . . .	..	..	..	..	..	..	..	..	..
Timber (sawn and unsawn)	Value . . . £ Cubic Yards . . .	1,784,840 401,921	2,055,400 404,023	..	2,468,080 899,739	..	3,701,680 1,342,910	..	4,779,280 1,651,065	..
Hay and Fodder	Value . . . £ Tons . . .	103,860 26,985	136,200 46,323	..	82,520 29,324	..	122,800 52,452	..	165,760 59,131	..

APPENDIX XIV

THE NUMBER OF AGRICULTURAL WORKERS IN BELGIUM

THE total of 697,372 is made up as follows :—

	Men.	Women.	Total.
Agriculturists, agronomes, horticulturists, arboriculturists	341,653	108,249	449,902
Labourers of all kinds employed on farms, market-gardens, and forests	192,012	55,458	247,470
Total . . .	533,665	163,707	697,372

As these figures vary so greatly from those of the 1895 census (1,204,810), it will be necessary to examine them in some detail, and see how far they can be relied on. It is probable that the figure for male agriculturists (341,653) may be taken as representing with fair accuracy the number of men (exclusive of paid labourers) whose income is mainly derived from agriculture, horticulture, market gardening and arboriculture. It not only includes the farmer himself, but probably, in the great majority of cases, the male members of his family who work with him.

The figure of 108,249, given as the number of female agriculturists, exclusive of female labourers, is much too low if the wives of farmers are supposed to be included; if not, it is much too high. In this matter the instructions to census-takers are by no means clear, and there is little doubt that some of them have included farmers' wives, and others have not done so. Of course a considerable number of women would be returned as farmers in their own right, for example, widows who continue to work the farms which belonged to their husbands, and wives of industrial workmen living in the country, who almost entirely manage their five or six acres while their husbands are at work in the towns. Such women may have been returned as farmers and their husbands as industrial workmen; and again, there are the unmarried women who are working farms in partnership with their brothers. This last class is considerable, on account of the law which insists upon the division of property at death. The writer has come across various cases where, instead of dividing a farm up, a brother and sister, each of whom has inherited half, have decided to work it together, sharing the profits. In such cases, no doubt, each would be returned as a farmer.

But the number of women who might be regarded as agriculturists in their own right is certainly much under 108,000. If we estimate it very roughly at 40,000 or 50,000, then the difference between the two figures represents the number of farmers' wives or daughters who have been classed as agriculturists. This is only a small proportion of the total number which ought to be shown by any adequate census, and seeing the important part played by the wives and daughters of small holders, it is a serious defect not to be able to ascertain exactly their number. Speaking roughly, it cannot be less than two hundred thousand, and is probably considerably more.

Turning now to the labourers, we find that the total number of these is returned as 247,470, of whom 192,012 are men. This figure is 62,000 above that of 1895. The explanation is that the 1895 figures only included workmen permanently employed, and excluded thousands of men engaged in the forests during the winter months, working temporarily upon farms during the summer, at the hay and corn harvests, the hoeing and cleaning of various crops, the lifting of potatoes, beetroots, etc., and generally employed upon piece-work. It also excluded three thousand labourers employed permanently in the forests, and all labourers engaged in horticulture and market-gardening. It is probable also that the 1900 figures include a large proportion of "*francsmannen*," that is, agricultural labourers who spend six or eight months of every year in France, working on the large farms there, but who have returned to Belgium on December 31, the date on which both of the censuses were made. It is unlikely that all of these have been included in the 1895 census, for they are not permanently employed, but as a rule go from farm to farm, wherever there is work to be done.

The total number of "*francsmannen*" is probably between fifty and sixty thousand, and as many of these own or rent small plots of land in Belgium, which are cultivated by their wives when they are absent in France, it is pretty certain that in the 1895 census many of them were returned as farmers. Viewed simply from the standpoint of Belgian agriculture, the figure of 192,012 is probably an over-estimate, for it includes, as we have seen, a certain number of labourers engaged during the greater part of the year in France.

Turning to the female labourers, the number 55,458, at which they are returned in 1900, is only 3371 less than in the 1895 census. The figure includes female farm servants who work both in the house and on the farm, and also apparently many wives of agricultural labourers who go out to work on neighbouring farms in times of pressure. It may be urged that women only employed at times of pressure would not be included in the 1895 census, which professes to be a record of those permanently employed; but the writer cannot otherwise explain the high figure—59,000—which he feels sure, from his knowledge of Belgian agriculture, is in excess of the number permanently employed. It seems possible that women who gave

occasional help have been returned as labourers in the census because they were the wives of male labourers who were employed permanently.

NUMBER OF AGRICULTURAL WORKERS IN BRITAIN

Unfortunately the census returns for the number of agriculturists in Great Britain are no more satisfactory than those available for Belgium, and the official figures can only be regarded as giving a rough estimate of the number. This, according to the 1901 census, was 1,400,602, made up as shown in the table on the following page.

Only a certain proportion of the women who help their husbands or parents on the farms has been included when taking the census. Moreover, in his general report for 1891, the Registrar-General admitted that the returns under the principal headings "are never very trustworthy, because there is no doubt that a considerable number of agricultural labourers return themselves as simply 'labourers' without anything to indicate that they are employed on farms, and these would be classified as 'general labourers'"; also that "there is good reason to believe that many agricultural carters and waggons, owing to the imperfect way in which they state their occupation, get transferred to the carters, carriers, and haulers of general traffic."

On the other hand, the census figures of Great Britain include grooms and coachmen engaged in rural districts, 16,677 gamekeepers and 140,337 gardeners, nurserymen, and florists. To include among agricultural workers, as is apparently done in some cases, girls who are selling flowers in city shops, is certainly to give a very wide interpretation indeed to the term "agricultural worker."

In short, no examination of the official figures can show with any certainty whether they err in the direction of over or under statement. The only course open, therefore, is to accept them as they stand, without attempting to correct them.

[TABLE

APPENDICES

581

PERSONS ENGAGED IN AGRICULTURE IN 1901 ^(a)

	ENGLAND AND WALES.				SCOTLAND.			
	Male.	Female.	Total.	Percentage of Total.	Male.	Female.	Total.	Percentage of Total.
Farmers and graziers	202,751	21,548	224,299	18.95	45,573	7,822	53,395	24.65
Sons, daughters, and other relatives of the above	89,165	18,618	107,783	9.10	17,550	12,402	29,952	13.83
Farm bailiffs	22,623	39	22,662	1.91	4,650	5	4,655	2.15
Shepherds	25,354	12	25,366	2.14	9,647	9	9,656	4.46
Agricultural labourers and farm servants	583,751	11,951	595,702	50.31	73,794	19,796	93,590	43.21
Grooms and coachmen in rural districts	38,723	...	38,723	3.27	1,520	...	1,520	0.70
Gamekeepers	16,677	...	16,677	1.41	5,367	...	5,367	2.48
Woodmen	12,034	1	12,035	1.02	4,126	14	4,140	1.91
Gardeners (other than domestic), nurserymen, seedsmen, and florists	123,125	5,104	128,229 ^(b)	10.83	11,610	498	12,108	5.59
Proprietors and attendants of agricultural machines	6,480	65	6,545 ^(b)	0.55	417	1	418	0.19
Others engaged in agriculture	5,757	226	5,983 ^(b)	0.51	1,763	34	1,797	0.83
Total	1,126,440	57,564	1,184,004	100	176,017	40,581	216,598	100

^(a) For an interesting article on the census returns by Mr. Wm. E. Bear the reader is referred to the *Journal of the Royal Agricultural Society of England*, vol. lxiv. 1903.

^(b) These three groups include 8683 employers in England and Wales. The corresponding figure for Scotland not being known the 14,323 persons are omitted in the calculation of the proportion of labourers to independent agriculturists on p. 215.

APPENDIX XV

SPECIMEN LETTERS OF ENQUIRY RECEIVED BY BELGIAN
STATE AGRONOMES

1. "Mr. ——— tells me I might consult you on the following point : Has the incoming tenant the right to sow small graminous and leguminous crops between the crops of the outgoing tenant? Will you be good enough to reply as soon as possible."

2. "Would you advise me to put chemical manure—and what sort—on a temporary pasture (six years old) before sowing winter barley? How many kilos are needed per hectare, and what else must be done to the soil before sowing?"

3. "Having a difference with the communal council of ——— as to the amount of water necessary for the farm of ———, I should be obliged if you could let me know how much water is usually required per day and per horse—large breed—and also per day and per head of cattle. I have given it as my view that each head of cattle could drink daily three or four pails, and a large horse six pails. Is that too much? Is it too little? The commune will only give me one cubic metre per day. But I have expostulated, as I find I need at least two cubic metres per day."

4. "You would greatly oblige me by answering the following questions:—

"I intend to grow sugar beet on a plot on which I had oats. It was limed and ploughed over in September, and then harrowed several times, and at present it is well manured. It is land of second and third quality. What fertilizer should I use? When and how? Before ploughing or after? The soil varies; it is partly schistose and some of it limey. I should like to say that I don't want to neglect anything that might help me to obtain a really good crop. The beetroots will not be lifted until the first fortnight in November.

"On a pasture which is somewhat dry I have spread 400 kilos of kainite and 400 kilos of basic in October. What fertilizer should I use in addition, to make things grow? On another piece of land which I have limed I put 400 kilos of kainite and 400 kilos of basic last October. With what kind of manure should I plough to have a complete yield? One plot is tree-planted, and both of them are intended for pastures. On another plot which I intend to mow I have not yet used any manure. What shall I use? In the hope that my request for advice will not give you too much trouble, I am." . . .

5. "I have a plot of 65 acres which I want to convert into permanent pasture. It is clayey and relatively poor. Will you oblige me by letting me know what seeds and what kinds of manure it would be best to use?"

6. "Knowing your great kindness and competence in all agricultural matters, I take the liberty of asking you to do me a service.

"The matter is as follows :—The tenant of one of my farms has received notice from me and must leave on the 1st of May. This winter three of his cows have miscarried. The new tenant enters with his cattle on 1st May, and the old one has refused to let me carry out very urgent repairs from April 15th. I consider it to be extremely necessary, in accordance with clause 1724 of the Civil Code, to disinfect and whitewash the stables and cowsheds before the entry of the new tenant. Could you not tell me whether you can issue an order permitting me to do this, or whether I must address myself to the President of the Court. I should also be glad to know what material, and how much of it, I must put into the limewash to rewhiten a vaulted stable of 22 m. length and 8 m. width. I apologise for troubling you, but being ignorant in these matters I thought that the disinfection of stables might perhaps be within your province. . . ."

7. "What do you consider the best material to put at the bottom of a ditch to prevent the loss of water? This ditch serves as a drinking pond for cattle in summer.

"In the hope that you will be good enough to answer, I am. . . ."

8. "I write to ask whether there are any means of destroying small white worms which look like leek roots, 12 to 15 mm. long. They attack onions, leeks, asparagus, salad roots, turnips, and especially strawberries. They eat all but the skins of the strawberries and turnips, and the interiors of the strawberries are sometimes quite filled with them.

"My garden—12 ares—is a light black soil, with a great deal of coal-ash. Every year I put on horse manure and a good quantity of human excreta, and every two years superphosphate. Last year I put on six cart-loads of horse manure and 1800 kos. of lime."

9. "I beg to ask you for some information.

"(a) I have a beautiful red clover which is mixed with false flax (commonly called 'trousers'). Is there any means of getting rid of the latter without doing any harm to the clover by using some fertilizer that you may know of?

"(b) I have moss and other weeds growing on a pasture where my cows graze. How could I destroy them?

"(c) When you were here to lecture you told us about the 'Raiffeisen' bank. Would you be good enough to let me know what steps I must take to become a member?"

10. "Our cows weigh on the average about 400 kos. and we sell to the dairy every day from 10 to 15 litres of milk per head. We bring up one calf every two years. We feed as follows:—hay, beetroots, and straw in considerable quantity. Will you be so good as to tell me what quantity of bran to give, and which is preferable, that of wheat or of linseed?"

11. "Will you be good enough to let me know as soon as possible

whether, on a good soft soil which has not had any manure for a long time, I could plant potatoes with chemical fertilizer rather than manure it in the ordinary way, as I shall not have any manure to spare before the end of April? What in your opinion would be the best way to ensure success?

“I have the same difficulty with regard to a plot where I want to plant feeding beetroots. With sincere thanks. . . .”

12. “I have planted tobacco (6000 plants) on the same land for four years. The first year it was excellent and very remunerative—a fat tobacco; the second year a good tobacco but less remunerative; the third year light, again decreased in weight, and this year even lighter, without aroma, and not maturing well. I cannot continue this crop under these conditions. Every year after the harvest I have fertilized with cow manure. The land is of medium quality, on a clay foundation, fat, rather dry, somewhat sloping and high. I should like to ask you what sorts of manures are needed for continuing the cultivation of tobacco on the same plot, also the way in which they should be used, and whether the soil must be turned over more deeply. I shall exactly follow your advice.”

APPENDIX XVI

RAILWAY RATES ON AGRICULTURAL PRODUCE

I. Full Truck Loads (5 tons)

Charges Per Ton

	BELGIAN STATE RAILWAYS					BELGIAN LIGHT RAILWAYS.					AN ENGLISH RAILWAY.							
	6½	12½	18¾	25	31	63	6½	12½	18¾	25	31	63	6½	12½	18¾	25	31	63
Miles.																		
Eggs, hops, cheese																		
Butter, hams, fruit	1/9	2/7	3/5	4/1	4/8	8/6	1/6	2/7	3/8	4/7	5/8	10/10		4/2	5/-	7/6	10/14/2	
Sugar														4/2	5/-	6/8	7/6	
Vegetables.														3/4	4/2	5/-	5/10	
Building wood, sawn stone							1/4	2/3	3/2	4/1	5/-	9/7		3/4	3/9	4/2	5/5	
Potatoes																		
Manure, packed																		
Building bricks	1/4	1/10	2/3	2/8	3/3	5/-	1/-	1/7	2/2	2/9	3/4	6/-		3/4	4/2	5/-	5/10	
Common manure, night soil, etc.							-/9	1/1	1/5	1/9	2/1	3/9		2/1	2/7	3/1	3/7	
														1/3	1/9	2/3	2/3	

II. LOTS OF 1 TON

	BELGIAN RAILWAYS.						AN ENGLISH RAILWAY. ¹									
	6½	12½	18½	25	31½	47	63	94	6½	12½	18½	25	31½	47	63	94
Miles . . .																
Cheese, butter, hams, fruit, seeds . . .									6/8	7/11	9/7	11/3	12/6	15/10	18/4	22/11
Eggs, hops . . .		9/7	11/2	12/10	14/5	18/5	21/8	28/-	5/10	9/7	10/10	12/11	14/7	18/4	21/3	26/3
Wheat, vegetables, farina, potatoes, manure . . .	A 8/- B 2/9 C 2/8	3/6	4/4	5/2	5/11	7/11	9/7	12/9	6/8	8/4	10/-	11/8	12/11	16/3	19/2	24/2
Onions, sugar . . .		3/10	5/1	6/3	7/5	10/5½	13/6	...	3/9	5/-	5/10	7/1	7/11	10/5	12/1	15/10
									5/5	6/8	7/11	9/2	10/5	12/11	15/-	18/9
									5/-	6/3	7/6	8/4	9/2	11/8	13/9	17/6

A. *State Railway, Express Goods Train*.—The rates include charge for delivery at domicile in the localities where the carting service is organised.

B. *State Railway, Ordinary Goods Train*.—The rates do not include charge for delivery.

C. *Light Railways, Mixed Train (Passenger and Goods)*.—The rates do not include delivery at destination. In the case of transport by Light and Main Railways combined, a charge of 2½d. per ton is made for portage at the junction.

¹ The figures in italics include delivery at destination; the others do not include anything for cartage.

III. LOTS OF 1 CWT.

		BELGIAN RAILWAY.					AN ENGLISH RAILWAY. ¹													
							Passenger Train.				Goods Train.									
Miles.		6½	12½	31¼	47	63	94	6½	12½	31¼	47	63	94	6½	12½	31¼	47	63	94	
Cheese, seeds								1/2	1/2	2/4	2/4	3/4	3/4	-/8	-/8	-/10	1/1	1/3	1/9	
Butter, hams														-/8	-/8	-/10	-/11	1/1	1/8	
Eggs .								1/-	1/-	1/6	2/1	2/4	3/-	-/8	-/9	-/11	1/3	1/8	1/11	
Hops .														-/8	-/8	-/10	1/1	1/4	1/10	
Wheat, farina, manure		A -/10 B -/4½	-/10 -/6	-/10 -/10½	-/10 1/3	-/10 1/6	-/10 ...	Quotations not published												
Vegetables, potatoes														-/6	-/7	-/8	-/10	-/10	1/1	
Fruit .								1/-	1/-	1/1½	1/6½	1/9	2/1	-/8	-/8	-/10	1/1	1/3	1/9	
Onions														-/8	-/8	-/10	-/11	1/1	1/8	
Sugar														-/8	-/8	-/10	-/10	1/-	1/4	
														-/7	-/8	-/8	-/10	-/11	1/2	

A. *State Railway, Express Goods Train*.—If charges are prepaid; 1/- if charges entered "to pay." The rates by ordinary goods train are not given, as traffic of less than 4 cwts. is almost always carried by "Express" (*Grande Vitesse*). The rates include charge for delivery at domicile in the localities where the carting service is organised.

B. *Light Railway, Mixed Train (Passenger and Goods)*.—The rates do not include charge for delivery at destination. In the case of transport by Main and Light Railways combined no charge is made, as a rule, for portrage.

¹ The figures in italics include delivery at destination; the others do not include anything for cartage.

V. CATTLE RATES

Miles	BELGIAN RAILWAYS.						AN ENGLISH RAILWAY.									
	6¼	12½	18¾	25	31¼	46½	62½	93½	6¼	12½	18¾	25	31¼	46½	62½	93½
<i>Waggon containing—</i>																
1 or 2 bulls, oxen, bullocks, cows, or heifers																
1 to 5 fat pigs or calves	A 3/6	4/6	5/6	6/5	7/4	9/9	11/7	15/3								
1 to 10 lean pigs, sheep, or she-goats	B 2/7	3/9	5/-	6/2	7/4	10/4½	13/5	...								
1 to 30 sucking pigs																
3 or 4 bulls, oxen, bullocks, cows, or heifers																
6 to 10 fat pigs or calves	A 5/3	6/8	8/1	9/6	11/-	14/7	17/4	22/9								
11 to 20 lean pigs, sheep, or she-goats	B 4/-	6/3	8/6	10/9	13/-	18/6	24/2	...								
31 to 60 sucking pigs																
5 to 8 bulls																
5 to 10 bullocks or heifers																
21 to 40 lean pigs																
11 to 25 fat pigs or calves	A 6/10	8/10	10/9	12/8	14/7	19/4	23/-	30/2								
21 to 60 sheep or she-goats	B 5/3	8/0½	10/11	13/8½	16/7	23/8	30/9½	...								
61 to 100 sucking pigs																

A. State Railway.

B. Light Railways.

VI. MILK RATES

		BELGIAN RAILWAYS. ¹						AN ENGLISH RAILWAY. ²									
Miles.		6½	12½	18½	25	31½	46½	62½	98½	6½	12½	18½	25	31½	46½	62½	98½
Tons.	Cwts.	Qrs.	Lbs.														
...	...	...	22														
...	...	1	16	-1	-1	-1	-2	-2	...								
...	...	2	10	-3	-3½	-4½	-6	-6	...								
...	...	3	4	-4	-4½	-6	-7	-7	...								
...	...	1	...	-4½	-6	-7½	-9	-9	...								
...	...	1	...	-3	-3	-4	-4	-4	...								
...	...	1	...	-5	-7	-9	-11	-11	...								
...	...	2	...	-8	-11	-12	-15	-15	...								
...	...	2	...	-5	-6	-7	-8	-8	...								
...	...	3	...	-8	-11	-12	-15	-15	...								
...	...	4	...	-9	-11	-12	-15	-15	...								
...	...	4	...	-10	-11	-12	-15	-15	...								
...	...	6	...	-1	-1	-1	-1	-1	...								
...	...	1	...	1/3	1/6	1/9	2/3	2/3	...								
...	...	1	...	1/3	1/9	2/3	2/3	2/3	...								
...	...	8	...	1/8	2/9	2/4	2/8	3/10	...								
...	...	10	...	1/6	2/11	2/9	3/4	4/7	...								
...	...	1	...	2/1	2/6	2/11	3/4	3/9	...								
...	...	1	...	2/9	4/4	5/3	6/6	7/9	...								
...	...	1	...	4/2	5/5	5/10	6/8	7/6	...								
...	...	1	...	1/6	2/7	3/8	4/9	5/10	...								

¹ *State Railway Express Goods Tariff.*—Milk addressed to dairies for the making of butter. For milk other than that addressed to dairies the rates are as on Table IV. The rates given in italics are those charged on the *Light Railways* for milk in cans. They do not include delivery at destination. In the case of transport by Light and Main Railways no charge is made as a rule for portorage at the junction. On the Light Railways empty cans are usually returned free of charge.

² *Passenger Tariff.*—The charges are "Station to Station," the rates in Roman figures being those at Company's risk, and those in italics at owner's risk. For milk addressed to dairies, specially agreed tariffs, lower than the above, usually come into operation.

* A large number of consignments are actually carried and delivered at destination at the charge of one penny. This very low rate has been fixed to help small-holders.

APPENDIX XVII

WORKMEN'S TICKETS

IN 1901, according to figures supplied to M. Vandervelde by the Railway Administration,¹ 659,787 workmen's tickets, available for one return journey weekly were issued, and 3,752,936 for one return journey daily. The total number of journeys made by holders of workmen's tickets in that year was 47,417,175. Assuming that the ratio between the number of tickets available for one weekly return journey and the number of those available for six return journeys during the week was the same in 1905 as in 1901, namely 3 of the former to 17 of the latter, then the 58,060,495 journeys made in that year with workmen's tickets would represent the issue of 786,450 tickets available for one return journey weekly, and of 4,456,550 tickets available for six return journeys weekly—5,243,000 tickets altogether. If, on the average, each traveller took out 45 weekly tickets, a total number of about 117,000 different workmen must have made use of the cheap tickets during the year in question. But if account is taken of the innumerable occasions for absence from work, voluntary and involuntary, the number of journeys per workman would be still further reduced; and the actual number of different persons availing themselves of cheap tickets would probably be even greater than the above estimate indicates.

That the result of this calculation is approximately accurate is borne out by a statement made by the Minister of Railways in the House of Representatives, to the effect that the total number of workmen travelling with cheap tickets on the State railways probably considerably exceeds 100,000. As, however, these figures take no account of the large number of workmen carried at reduced prices on the light railways, nor of those carried on the few main railways which are still in private hands, it is safe to assume that the number of individual workmen who make use of the cheap tickets exceeds, perhaps considerably, 125,000.

¹ *L'Exode rural*, Annexe iv.

APPENDIX

FINANCES OF THE

INCOME.					
Source of Income.	16 Communes of more than 40,000 Population.	24 Communes 20,000 to 40,000 Population.	352 Communes of less than 20,000 Population.	2281 remaining Communes (calculated).	Totals.
	£	£	£	£	£
Revenue from Public Property . . .	382,940	22,430	89,860	188,090	683,320
Trading Enterprises ¹	66,830	3,870	2,380	4,990	78,070
Rates	1,549,620	326,690	381,970	799,560	3,057,840
Various sums in arrear paid during the year	307,440	17,040	47,480	99,400	471,360
Miscellaneous	1,145,510	158,900	259,190	542,520	2,106,120
Totals	3,452,340	528,930	780,880	1,634,560	6,396,710
Loans raised during the year ²	2,446,800	371,310	172,230	360,120	3,350,460
Totals (including Loans)	5,899,140	900,240	953,110	1,994,680	9,747,170
Population	1,484,641	570,141	1,650,659	3,455,106	7,160,547

¹ The total receipts of Trading Enterprises amounted to £780,760, but the expenses in respect of same being included in the "Miscellaneous Expenses," cannot be separated accurately. We have therefore deducted nine-tenths of this sum representing the estimated expenditure.

XVIII

BELGIAN COMMUNES (1905)

EXPENDITURE.					
Items of Expenditure.	16 Communes of more than 40,000 Population.	24 Communes 20,000 to 40,000 Population.	352 Communes of less than 20,000 Population.	2231 remaining Communes (calculated).	Totals.
	£	£	£	£	£
Internal Administration	565,460	105,600	164,110	342,590	1,177,760
Poor Law	213,320	80,270	131,770	275,080	700,440
Military Expenditure { <i>Garde Civique</i>	11,920	4,120	2,060	4,300	22,400
<i>Milice</i>	460	200	650	1,370	2,680
Education	542,940	149,800	265,380	554,050	1,512,170
Fine Arts	86,340	13,600	11,080	23,150	134,070
Religion	5,880	3,380	10,080	21,060	40,400
Roads and Bridges	80,750	23,980	54,160	113,080	271,920
Public Works	51,670	24,250	16,030	33,410	125,360
Lighting of Streets	45,980	22,910	29,930	62,500	161,320
Public Health	138,340	22,140	28,960	60,480	249,920
Miscellaneous	62,770	33,410	23,620	48,860	168,660
Totals	1,805,830	483,510	737,830	1,539,930	4,567,100
Interest and Sinking Fund on Loans	1,393,440	207,270	158,440	330,770	2,089,920
Totals (including repayment of Loans)	3,199,270	690,780	896,270	1,870,700	6,657,020
Popl		570,141	1,650,659	3,455,106	7,180,547

other tables. They are shown here in order that the

fig

APPENDIX XX

ANALYSES USED IN DIETARY STUDIES, SHOWING PERCENTAGE OF PROTEIN, FAT, AND CARBOHYDRATES CONTAINED IN THE VARIOUS FOOD-STUFFS

SOURCES OF ANALYSES

Those from U.S.A. Dept. Agric. Bull. 28 (revised 1902, Atwater)	are marked	A.(1)
" " " " " " 18, Bigelow	"	A.(2)
" Analyses made in the Royal College of Physicians, Edinburgh	"	Edr.
" Hutchison, Robert, <i>Food</i> (revised edition, 1906)	"	H.
" Allen, <i>Commercial Organic Analyses</i> (second edition)	"	Al.
" Balland, <i>Journal Pharm. Chem.</i> 1898	"	B.
" Sieben, <i>Tests: Anal. Chem.</i> xxiv.	"	S.
" <i>Solvay Institute</i> , vol. viii. Part II. Brussels, 1907	"	I.S.
" König, <i>Nahrungs- und Genussmittel</i>	"	K.
" Mitchell, C. A., <i>Flesh Foods</i> (Chas. Griffin & Co. Ltd.), 1900	"	M.
" S. H. Davies, M.Sc.	"	D.
" Fearmain and Moor (quoted by Wynter Blyth, <i>Foods: Their Composition and Analysis</i> , 5th ed.)	"	P.M.
" Heron	"	Hn.
" Bauer quoted by Hutchison	"	Br.

ANIMAL FOODS

KIND OF FOOD.	Source of Analysis.	Protein.	Fat.	Carbo- hydrate.
		Per cent.	Per cent.	Per cent.
<i>Meat</i>				
<i>Bouilli</i> (meat for <i>bouillon</i>)	I.S.	20	1	..
<i>Carbonnade</i> of beef	I.S.	15	28	..
<i>Filet d'Anvers</i>	I.S.	19	36	..
Beef (flank)	A.(1)	17	19	..
Miscellaneous cuts (free from visible fat).	A.	22	3	..
Beef (ribs)	A.	14	21	..
" (<i>cuisse</i>) (rump)	I.S.	13	5	..
Smoked beef	A.	26	7	..
Beefsteak	A.	17	16	..
Soup	I.S.	2	..	..
<i>Fats</i>				
Dripping	Edr.	..	98	..
Lard	A.	..	100	..
Margarine	A.	1	83	..
Suet	A.	5	82	..
Fowl	A.	14	12	..
Horseflesh	B.	19	10	..
Lamb (leg)	A.	16	20	..
<i>Miscellaneous</i>				
" <i>Bloempanche</i> " ("black pudding")	I.S.	12	19	..
Brains	A.	9	9	..
Udder (cow's)	I.S.	19	17	..
Feet (pig's)	A.	4	7	..
Heart (sheep's)	H.	17	13	..
<i>Kipkap</i> (meat scraps)	I.S.	14	15	1.5
Liver—				
(bullock)	A.	21	4	2
(sheep)	H.	28	9	5
(pig)	A.	21	4	1.5
Tripe	H.	16	8	..
<i>Mutton</i>				
Flank	A.	14	37	..
Ragoût of	I.S.	14	34	..
Sides	A.	13	24	..
Pigeon	H.	22	1	..

**ACHAT DES DENRÉES ALIMENTAIRES, etc.,
et autres dépenses de toutes espèces.**

Quantité exacte.	DÉSIGNATION DES ARTICLES.	PRIX.	
		FR.	C.
1 Kg	beufi	1	40
1 Kg	sucra	0	65
1 Kg 1/2	beurre	3	00
1 1/2 Kg	houille	0	80
1/2 Kg	Saindoux	1	10
2 Kg	Pain	0	50
1 Kg	Viante de bœuf	1	20
14 Kg	Pomme de terre	1	40
1 Kg	lard	1	35
13	œufs	1	25
1/2 Kg	sirop	0	50
1/2 litre	lait	0	10
1 Kg	savon	0	40
1 Kg	carotte	0	10
	légumes pour soupe	0	10

PRIS AU JARDIN

Indiquez ci-dessous la quantité exacte de tous les produits pour l'alimentation (tels qu'œufs, lait, légumes, poulets, etc.) pris au jardin ou à la ferme :

NOTA. — Les produits renseignés déjà à l'inventaire page 1 ne doivent plus être indiqués ci-dessous.

Quantité exacte.	DÉSIGNATION.

DONS

Indiquez ci-dessous tous les dons ou autres articles reçus gratuitement.

Quantité exacte.	DÉSIGNATION.

- 1° Renseignez dans la colonne 1 le nombre des membres qui ont participé au repas du ménage, soit chez eux, aux champs, ou ailleurs.
- 2° Indiquez dans la colonne 2 les noms des membres du ménage qui ne participent pas aux repas de celui-ci, achètent leurs aliments ou les prennent chez des amis.
- 3° Indiquez dans la colonne 3 le nombre des personnes supplémentaires invitées pour les repas.

REPAS.	Nombre des membres du ménage qui y ont pris part. 1.	NOMS des membres du ménage prenant leurs repas ailleurs. 2.	Nombre des personnes supplémentaires invitées pour les repas. 3.
<p>En quoi consistait le déjeuner ?</p> <p><i>Oufs hard pain café</i></p>	5		
<p>Si l'on a mangé entre le déjeuner et le diner, dire ce que l'on a mangé.</p>			
<p>En quoi consistait le diner ?</p> <p><i>Pain Bouillon viande bouillie</i> <i>Pomme de terre carotte café</i></p>	5		
<p>En quoi consistait le goûter ?</p> <p><i>Pain beurre café sirop</i></p>	3	<i>les parents</i>	
<p>En quoi consistait le souper ?</p> <p><i>Pain beurre café viande bouillie</i></p>	2	<i>les enfants</i>	

ANIMAL FOODS (*continued*)

KIND OF FOOD.	Source of Analysis.	Protein.	Fat.	Carbo- hydrate.
		Per cent.	Per cent.	Per cent.
<i>Pork</i>				
Bacon (smoked)	I.S.	8	62	..
Ham "	A.	14	33	..
Head "	K.	4	14	..
(<i>hure de porc</i>)	I.S.	20	24	..
(<i>tête pressée</i>).	I.S.	5	65	..
Shoulder	A.	12	30	..
Side	I.S.	19	18	..
Rabbit	A.	21	8	..
Sausages	....			..
<i>Veal</i>				
Forequarter	A.	15	6	..
Haeh (<i>Fricandeau</i>)	I.S.	17	1	..
<i>Petite tête de Bouf</i>	I.S.	18	17	..
<i>En tortue</i>	I.S.	11	6	4
<i>Vinaigrette</i>	I.S.	19	14	..
<i>Fish</i>				
Dried—				
Plaice	D.	62	8	..
Fresh—				
Cod (dressed)	A.	11	..	..
Flounder (dab)	A.	14	0·5	..
Haddock	A.	8	0·2	..
Hake	A.	7	0·3	..
Herring	A.	20	7	..
Mackerel (whole)	A.	10	4	..
Plaice	M.	17	2	3
Skate (lobe of body)	A.	9	1	..
Fried—				
Haddock	A. (2nd ed.)	19	0·4	..
Plaice	I.S.	34	4	6
Fresh—				
Mussels	A.	5	0·5	2
"	I.S.	9	1	4
Oysters	A. (2nd ed.)	6	1·3	3
Salt—				
Cod	A. (2nd ed.)	16	0·4	..
Herring (bloater)	D.	21	9	..
Smoked—				
Eel	A.	15	7	..
Herring (kipper)	A.	21	9	..
" (<i>sauzet</i>)	I.S.	23	13	..
Sardines (tinned)	A.	24	12	..
Shrimps	A.	25	1	..
<i>Dairy Products</i>				
Butter	A.	1·0	85	..
Buttermilk	A.	3	0·5	5
Cheese—				
<i>Gruyère</i>	A. and I.S.	28	28	..
<i>Brie</i>	A. and I.S.	18	28	..
<i>Brussels</i>	A. and I.S.	23	29	..
<i>Roquefort</i>	A. and I.S.	23	29	..
<i>Hollande</i>	A. and I.S.	28	28	..
<i>Edam</i>	A. and I.S.	25	27	..
<i>Camembert</i>	A. and I.S.	25	24	..
Cream (centrifugal)	Richmond, 1894	2	49	3
Eggs	A.	13	9	..
Milk—				
Condensed sweetened whole	A.	8	10	52
Skimmed	A.	3·4	0·3	5
Whole (sp. g. 1030)	A.	3·3	4	5

VEGETABLE FOODS

KIND OF FOOD.	Source of Analysis.	Protein.	Fat.	Carbo- hydrate.
		Per cent.	Per cent.	Per cent.
<i>Cereals</i>				
Flour (patent roller process)	A.(1)	13	1·5	72
Biscuits—				
<i>Mastelles</i>	I.S.	8	2	56
<i>Petit Beurre</i> s	I.S.	1	14	80
<i>Speculation</i>	I.S.	1	13	74
Various	Br.	10	8	72
Bread—				
Black (rye)	A.	10	1	49
Rye	A.	9	1	53
Currant	A.	7	5	56
<i>Pain d'épice</i> (gingerbread)	A.	6	9	63
<i>Petits Pains</i>	A.	8	2	56
White (baker's grade)	A.	9	1	53
Wholemeal	A.	10	1	50
Cake	A.	6	9	63
Macaroni and vermicelli	B.	11	0·5	76
Rice	A.	8	0·3	79
<i>Biscottes hollandaises</i> (rusks)	I.S.	2	4	82
Sago	Hn.	..	..	86
Semolina	I.S.	12	..	72
<i>Vegetables</i>				
Asparagus	I.S.	1	..	2
Beans—				
Dried	A.	23	2	60
<i>Haricots verts</i>	I.S.	1	..	2·5
Brussels sprouts	I.S.	4	1	4
Cabbage	A.	1	..	5
Carrots	A.	1	..	7
Cauliflower	A.	2	0·5	5
Celery	A.	1	..	3
Chestnuts	A.	5	4·5	35
Chicory	I.S.	0·5	..	1
Leeks	A.	1	0·5	5
Leek and chervil soup	I.S.	2	3	5
Lentils	A.	26	1	59
Lettuce and endive	A.	1	..	3
Onions	A.	1	..	9
Peas—				
Dried	A.	25	1	62
Green shelled	A.	7	..	17
" in the shell	A.	4	..	10
Pea soup	I.S.	4	1	8
Radishes	A.	1	..	4
Pickles (mixed)	A.	1	..	4
Potatoes	A.	2	..	15
Potato flour . . . . .	..	5	0·5	76
Potatoes (fried)	A.	7	40	47
Salad greens	A.	4	0·5	6
Spinach	A.	2	..	3
Tomatoes (fresh or tinned)	A.	1	..	4
Tomato soup	I.S.	2	1	6
Turnips	A.	1	..	6
<i>Fruit</i>				
Dried—				
Currants	H.	1	3	64
Figs	A.	4	..	74
Prunes	A.	2	..	62
Raisins	A.	2	3	69
Fresh—				
Apples	A.	0·3	0·3	11
Cherries	A.	1	..	16

VEGETABLE FOODS (*continued*)

KIND OF FOOD.	Source of Analysis.	Protein.	Fat.	Carbo- hydrate.
		Per cent.	Per cent.	Per cent.
<i>Fruit (continued)</i>				
Fresh—				
Grapes	A.	1	1	14
Oranges	A.	0·6	..	9
Pears	A.	0·5	0·5	13
Plums	A.	1	..	17
Strawberries	A.	1	..	7
<i>Sugars, etc.</i>				
Honey	K.	..	..	75
Jam (various).	D.	..	..	65
Sugar . . . . .	....	..	..	100
Golden syrup . . . . .	....	..	..	72
Treacle and cane molasses . . . . .	....	..	..	70
<i>Various</i>				
Arrowroot	H.	1	..	83
Chocolate	A.	13	49	30
Cocos	A.	22	29	38
Lager beer	R.	0·5	..	5
Stout	D.	0	0	7

APPENDIX XXI

LOCAL TAXATION OF PUBLIC HOUSES

APART from the national license duty, levied on every establishment for the on-sale of spirits opened since 1889, the provincial and communal Governments have the power to levy certain other taxes, subject to the consent of the central Government. Of the nine provinces, all but two, in which the "trade" interests are said to be particularly strong, have imposed taxes on all houses licensed for the sale of spirits, as under:—

	s.	d.	£	s.	d.
Antwerp	ranging from	12	6	to	3 2 5
East Flanders	„	9	7	„	2 8 0
Liège	„	8	0	„	4 0 0
Luxembourg	„	14	5	„	1 8 10
Namur	„	13	5	„	2 16 0
West Flanders	„	9	7	„	1 12 0

And a registration fee for new houses, ranging from £6 to £12, according to the size of the commune.

Limbourg levies taxes on all houses registered for the sale of beer and wine, etc., ranging from 2s. 3d. to 16s. ; and taxes on all fully licensed houses, ranging from 16s. to £1:18:5 ; also a registration fee for all newly registered public houses of £2.

In addition to provincial taxes, most of the 2627 communes impose a special tax on public houses where spirits are sold, and some-

times also on houses only registered for the sale of beer and wine. This communal taxation is not, as a rule, very high, the amount varying greatly from commune to commune. There is a tendency on the part of the Government authorities to refuse communes permission to impose other new taxes if public houses are not yet taxed.

No useful purpose would be served by giving a list of the exact local taxes in every commune, but the following examples may be taken as showing roughly the general level of such taxation:—¹

ANNUAL COMMUNAL TAXES ON HOUSES LICENSED FOR THE
SALE OF SPIRITS

(a) <i>Urban Communes</i> —	s.	£	s.	d.
Bruxelles	from 16	to 4	0	0 ²
Liège	12	8	0	0
Mons	12	1	12	0
La Louvière	4	0	12	0
Charleroi	4	4	0	0 ³
Tournai	10	1	4	0
Soignies	12	0	16	0
Huy	12	1	4	0
Antwerp, £2 : 8s. for every waiter or waitress beyond two in all houses registered for the sale of drink.				
Ghent, 25 per cent on the ordinary rates (<i>droit de patente</i>) on all houses registered for the sale of drink, if the <i>droit de patente</i> exceeds £2 : 0 : 10.				
(b) <i>Rural Communes</i> —	s.	d.	s.	d.
Vierset-Barse	4	0		
Sart Dames-Avelines	8	0		
Pitthem	2	5		
Perwez	8	0		
Trivières	4	0	or 8	0

In addition to these annual taxes, a few communes impose a registration fee on the opening of a new public house. The number of communes where such a registration fee is payable is as yet very small, probably under thirty. The fees vary from £2 in small towns to £12 in larger towns like Malines, Courtrai, Dinant, etc. In St. Gilles, a wealthy suburb of Brussels, the fee is £20.

An examination of the above figures shows that even in the localities where special taxes are levied on public houses, they are not high enough to act as a serious check to their establishment. Thus, in a large town like Liège, a small fully licensed house would only pay

¹ In the figures which follow, no account is taken of the *droit de patente*, as this is an annual tax which must be paid by all persons having a place of business.

² If trade exceeds £500, the tax is augmented by 4s. for every £20 of sale.

³ On all houses registered for the sale of drink.

12s. a year in special local and provincial taxation, while the largest licensed house only pays £12. In both cases the national tax of £8 must be added in the case of houses opened since 1889. In the smaller towns the local taxation, as may be noted from the figures given above, is considerably lower.

APPENDIX XXII

ANALYSIS OF TWENTY-EIGHT SAMPLES OF GIN (GENIÈVRE) COLLECTED IN TWENTY-EIGHT PUBLIC-HOUSES IN BELGIUM IN 1909

Name of Commune.	Retail Price per Glass.	Quantity of Liquor contained in Glass.	Percentage of Alcohol (by Volume).	Price per gallon of 50° (Gay Lussac).
	Pence.	c.c.		s. d.
Denderleeuw (E. Flanders)	1	38·3	36·9	12 9
" "	1	37·2	38·3	12 8
" "	·8	21·3	37·5	18 0
Sottegem	·6	13·7	45·6	17 4
" "	1	28·4	44·2	14 6
" "	1	25·6	44·5	15 10
" "	1	27·3	44·5	14 10
Ghent	1	26·8	44·5	15 1
" "	1	27·8	44·5	14 7
" "	1	32·3	43·2	12 11
" "	$\frac{1}{2}$	14·2	44·2	14 5
" "	$\frac{1}{2}$	15·7	50·0	11 6
Louvain (Brabant)	1	40·3	33·9	13 2
" "	1	29·3	33·9	18 2
" "	1	22·4	50·9	15 9
Ottignies	1	24·0	28·1	26 9
" "	1	23·9	42·0	17 11
" "	1	29·7	44·6	13 7
Namur (Namur)	1	25·5	42·8	16 6
" "	·8	29·8	44·1	11 0
" "	1	30·9	30·3	19 3
Verviers (Liège)	1	37·5	35·9	13 5
Charleroi (Hainaut)	1	32·7	43·0	12 10
" "	1	42·0	32·6	13 1
" "	1	42·0	32·6	13 1
" "	2	76·2	36·6	12 10
" "	1	30·9	34·9	16 9
Haine-St.-Pierre (Hainaut)	1	35·6	36·6	13 10

Average of twenty-eight, 15·1.

NOTE.—In all towns the samples were taken in very small and poor as well as in larger public-houses frequented by the better-class workmen. It does not appear that prices rule higher in the better houses, or *vice versa*.

APPEND

THE CONSUMPTION OF SPIRITS IN BELGIUM FROM

	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897
Home production . . .	12,463,345	12,944,263	12,937,374	12,861,899	12,869,845	13,831,133	12,027,230	13,043,267,
Imports . . .	331,235	361,586	358,945	352,584	397,064	402,456	388,283	267,
Total . . .	12,794,580	13,305,849	13,296,319	13,213,983	13,266,409	14,233,594	12,415,563	13,311,
Exports . . .	383,353	225,536	215,645	94,683	98,006	104,851	82,314	65,
Home consumption . . .	12,411,227	13,080,313	13,080,674	13,119,300	13,168,403	14,128,743	12,333,249	13,246,
Used for industrial purposes ¹ . . .	330,135	330,135	330,135	330,135	330,135	330,135	330,135	330,
Used for human consumption ² . . .	12,081,092	12,750,178	12,750,539	12,789,165	12,838,268	13,798,608	12,003,114	12,915,
Population . . .	6,069,321	6,136,444	6,195,355	6,262,272	6,341,958	6,410,783	6,495,886	6,586,
Average consumption (in gallons) per head of the population . . .	1.99	2.08	2.06	2.04	2.02	2.15	1.84	1.96
Quinquennial do . . .	..	..	..	2.00				

¹ Previous to the law of 1896, no exemption from excise duty existed for alcohol used for industrial purposes; the quantity so used in the years preceding 1897 is officially estimated at 330,135 gallons.

XIII

1900 TO 1907—IN GALLONS OF 50° (GAY LUSSAC)

1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
1058,842 274,760	14,932,138 270,694	15,779,374 807,246	16,218,542 392,574	14,468,544 261,423	10,833,116 222,268	14,482,670 233,911	13,617,541 270,292	14,008,794 274,364	14,693,868 308,698
333,602 575,778	15,202,782 2,596,076	16,086,620 1,839,226	16,611,116 1,284,203	14,724,967 1,154,086	11,055,384 1,437,127	14,716,581 3,558,525	13,887,833 2,850,584	14,283,158 2,893,193	15,002,566 2,431,466
757,824	12,806,706	14,247,394	15,326,918	13,570,881	9,568,257	11,153,056	11,037,249	11,389,965	12,571,100
330,135	330,135	442,095	580,333	883,129	1,434,370	2,075,228	2,120,743	2,471,545	3,610,858
427,689	12,476,571	13,805,299	14,746,580	12,687,682	8,133,887	9,082,828	8,916,506	8,918,420	8,760,242
669,732	6,744,532	6,693,543	6,799,999	6,896,079	6,985,219	7,074,910	7,160,547	7,238,622	7,890,093
1·86	1·85	2·06	2·16	1·84	1·16	1·28	1·24	1·23	1·11
1·95					1·20				

The actual consumption within any particular year does not, of course, correspond exactly with these figures, as account is taken of stocks carried over from one year to the other.
Estimate.

APPENDIX XXIV

THE estimate of the *per capita* expenditure on drink is arrived at as follows :—

1. EXPENDITURE ON SPIRITS

In consequence of the imposition of a duty on houses licensed for the sale of spirits, the selling price of the latter has been raised. This has been done by lessening the size of the glass, or by weakening the strength of the spirit. Sometimes both processes have been adopted.

The strength of the spirit which is retailed varies from district to district, and also varies locally according to the character of the house. For instance, the spirit sold in the cafés frequented by the bourgeois class is usually stronger than that sold in the *cabarets* patronised by working people. In the absence of a very elaborate and exhaustive investigation, covering the whole of Belgium, it will be impossible to give exact figures, but the writer has obtained samples for analysis, and information, from various districts,¹ which show that, roughly speaking, the retail price of gin in Belgium is equivalent to 15s. 3d. per gallon of spirits of 50° (Gay Lussac). Of course spirits are not sold of this strength; the strength at which they are actually retailed appears to vary from about 30° to about 45°. The size of the glass sold for 1d. also varies from about 2·3 to 4·2 centilitres (0·04 to 0·073 pints), in some districts a large glass of weak spirits being preferred, in others a smaller glass of strong spirits.

Official statistics show that for the years 1903-7 the *per capita* consumption of spirits in Belgium was $1\frac{1}{5}$ gallons of 50°. Accepting the above estimate, that the retail selling price of spirits is equivalent to 15s. 3d. per gallon of 50°, we arrive at 18s. 5d. as the *per capita* expenditure upon spirits. This figure is not put forward as being absolutely accurate, but the writer believes that it is an underestimate rather than an over-estimate, especially as it is based upon the expenditure for gin, which is the cheapest spirit sold, no account having been taken of the expenditure upon cognac, whisky, or the more expensive spirits and liqueurs.

2. EXPENDITURE ON BEER

The *per capita* consumption of beer in the period 1903 to 1907 was 49·28 gallons. The average selling price, in casks, is about $5\frac{1}{2}$ d. per gallon. Sold by the glass this rises to 1s. 1d. to 1s. 3d. per gallon—say 1s. 2d.

¹ See Appendix XXII.

Beer is almost universally drunk by all classes of society, and is habitually taken with meals. Although there are no official statistics on which to base the calculation, careful enquiry shows that it will probably be safe to calculate that half the total sale is in casks for home consumption, and half by the glass. At the average prices given above, this gives 39s. 10d. as the *per capita* expenditure on beer.

3. EXPENDITURE ON WINE

The *per capita* consumption of wine is only 1.05 gallons. The prices vary enormously, and it will certainly be safe to put the average as high as 5s. 5d. per gallon—especially as the wine is chiefly consumed by the well-to-do classes, who drink the better qualities. At 5s. 5d. a gallon, we get 5s. 9d. as the *per capita* expenditure.

APPENDIX XXV

THE principal laws affecting the drink trade are the following:—

1887. Law prohibiting the seizure of wages for public house debts.

1887. Law prohibiting the payment of wages in public houses.

1887. Law enacting the arrest of persons “found in the streets, public places, public houses, etc., in such a state of drunkenness as to cause disorder, annoyance, or danger to themselves or others.” This law, in itself less rigorous than the laws against public drunkenness in many other countries, is not everywhere administered. One clause makes it a punishable offence to serve with drink persons obviously in a state of intoxication; but the fine is very low, namely, from four to twenty shillings, and even this is not enforced.

1889. Housing Act, includes a clause prohibiting the sale of drink in any house built under the provisions of this Act.

1889. Licensing Act, imposing for the first time a license duty on the sale of spirits in quantities of less than three-and-a-half pints, at the following rates:—

£	s.				
8	0	in communes with 60,000 and more inhabitants.			
6	0	„ „	30,000 to 60,000	„	
4	0	„ „	15,000 to 30,000	„	
3	4	„ „	5,000 to 15,000	„	
2	8	„ „	less than 5,000	„	¹

Although this law only applies to houses opened since 1889, it has reduced the number of houses where spirits are sold from

¹ The local taxation of public houses is the subject of Appendix XXI.

185,036 in 1889, to 128,911 in 1900. It is important to note that in the same period the number of houses for the sale of beer and wine increased from 6088 to 68,910.

1896. Law on excise of spirits, transferring the duty previously levied on the *presumed* contents of the mash-tub to the *actual* output. In consequence of this reform, every increase in the yield of spirits due to improved methods of production which previously escaped duty has been brought into account. The law exempted from duty industrial alcohol, *i.e.* alcohol used for industrial purposes and not for consumption.
1898. Trade Union Act, clause excluding from eligibility to official positions all persons interested in the liquor traffic.
1906. Law forbidding the manufacture, importation, or transport of absinthe—the use of which was beginning to become popular in Belgium.

Among administrative reforms is to be mentioned—the prohibition of the sale of spirits in barracks and railway stations, and by persons in State employment. This is strictly enforced.

APPENDIX XXVI

Commune of.....

Class.....

ENQUIRY SCHEDULE

Questions

Answers

(1) Is your house in a street, an alley, or a court?

(2) Do you occupy an entire house, or part of one?

(3) On which floor are the rooms you occupy?

(4) What is your rent per month? (If you are owner of your house, kindly say how much it cost you.)

(5) Name the different members of your household, their sex, age, occupation and wage, per day, week or fortnight.

Persons.	Sex.	Age.	Occupation.	Wage per.

(6) Have you any lodgers? How many?

(7) What do they pay for their lodging?

(8) What do they pay for their board?

What do they pay for their washing?

(9) Does any one sleep in the kitchen? How many persons?

(10) Number of Bedrooms?

How many persons sleep in the first?

 " " second?

 " " third?

 " " fourth?

(11) How many mansards have you?

(12) In how many mansards are there persons sleeping?

(13) How are the other mansards used?

(14) Have you an attic? Does any one sleep there?

ENQUIRY SCHEDULE (*continued*)

<i>Questions</i>	<i>Answers</i>
(15) Have you a parlour or best room ?	
(16) Have you an outhouse or shed ?	
(17) Have you a workshop ?	
,, wash-house ?	
,, scullery ?	
(18) Have you any other rooms ?	
(19) Has your house a passage ?	
(20) Are there one or more cellars ?	
(21) Have you a yard ? What size ?	
,, garden ? What size ?	
(22) How do you obtain your drinking-water ?	
From a public pump or well ?	
,, private pump ?	
,, tap ?	
(23) How many families use this pump ?	
(24) Have you a closet ?	
(25) How many families use this closet ?	
(26) How many members of your family can neither read nor write, and which are they ?	

GENERAL REMARKS

APPENDIX XXVII

THE COST OF BUILDING MATERIALS

Bricks.—The cost (delivered on the site) of bricks such as are used for the erection of working men's houses in various Belgian towns is as follows:—

Town.	Price per Thousand.		Size of Brick (in Inches).
	s. d.	s. d.	
Antwerp	9	6	$7 \times 3\frac{1}{2} \times 2$
Ghent	9	6	502 per sq. yard
Alost	9	6	$8\frac{1}{4} \times 4 \times 2\frac{1}{3}$
Renaix	8	0	
St. Nicolas	12	5	$7 \times 3\frac{1}{3} \times 2$
Liège	8	0	$8\frac{1}{2} \times 4 \times 2\frac{1}{2}$
Jupille	11	1 to 12 8	737 per sq. yard
Wandre	14	3	$9\frac{1}{2} \times 4\frac{3}{4} \times 2\frac{1}{3}$
Charleroi	12	8	$9\frac{1}{2} \times 4\frac{3}{4} \times 2\frac{1}{3}$
York (<i>England</i>)	12	0	$8\frac{1}{2} \times 4 \times 2\frac{1}{3}$
	25	9	$9 \times 4\frac{1}{2} \times 3$

It will be noted that the sizes of the bricks vary. In most cases they are much smaller than the ordinary English bricks, though in Liège, Jupille, Wandre, and Charleroi they approach them in size.

If we compare the cost of finished brickwork in the two countries, we find that the price per cubic yard for this, including stonework, is 11s. in Ghent and Verviers, and 11s. 4d. in Brussels. The price for brickwork in York, without stonework, is 16s. per cubic yard. The exact sum to be added for stonework is rather difficult to estimate, but even without it, the cost of brickwork in York is much higher than in Belgium.

Tiles.—The cost of tiles such as are used on workmen's houses in Belgium is as follows. The prices quoted are per square yard:—

	s.	d.
Antwerp	1	8
Ghent	1	6
Renaix	1	6
Brussels	1	8
Charleroi }	2	2
Verviers }		

as compared with 2s. per square yard in York.

It will thus be seen that, with the exception of Charleroi and Verviers, the price of tiles is cheaper than in York. In Charleroi a special tile has been quoted for; hence the high cost. It is possible that the same has been done in Verviers.

Slates.—The price of slating varies considerably, in some towns being less and in others considerably more than in York. It is 2s. per square yard fixed in Ghent, 2s. 4d. in Renaix, 2s. 8d. to 3s. in Liège, 3s. 4d. in Brussels, and 3s. 8d. in Verviers. The price for Welsh slates fixed in York is 2s. 5d. per square yard.

Timber.—The sizes and qualities of timber used for the erection of houses in Belgium and York vary so greatly that no complete comparison is possible in the matter of cost; but, so far as can be ascertained, the difference is unimportant.

APPENDIX XXVIII

OVERCROWDING

	Number of Adult Persons. ¹	Percentage of Persons sleeping in Houses with, per Bedroom,			
		Two Adult Persons or less.	More than Two Persons.	More than Three Persons.	More than Four Persons.
Brussels and Suburbs—					
Class I.	222	67·34	32·66	11·71	4·51
" II.	1021	44·47	55·53	15·77	10·14
" III.	741½	43·02	56·98	25·32	17·46
Antwerp and Suburbs—					
Class I.	209½	56·32	43·68	13·13	2·39
" II.	278	44·78	55·22	15·11	3·24
" III.	220½	28·12	71·88	29·25	9·30
Ghent—					
Class I.	76½	52	48	18	18
" II.	320	35	65	29½	14
" III.	358	32	68	37	16
Charleroi—					
Class I.	563	67·50	32·50	2·13½	...
" II.	281	37·40	62·60	15·61	6·23
" III.	69½	14·39	85·61	46·76	35·97
Borinage—					
Class I.	131	86·73	15·27	...	...
" II.	452½	68·4	31·6	9·61	0·99
" III.	584	30·74	69·26	44·77	26·88
Centre—					
Class I.	565½	89·21	10·79	41·51	1·77
" II.	752	76·86	23·14	6·12	0·60
" III.	1007	38·28	61·72	29·10	12·17
Liège—					
Class I.	295	57·12	42·88	14·58	20·51
" II.	270½	41·59	58·41	30·50	9·61
" III.	345	14·64	85·36	48·41	27·54
Walloon Industrial Towns—					
Class I.	303	80·69	19·29	7·43	4·78
" II.	428½	40·26	59·74	33·26	19·14
" III.	728	19·85	80·15	56·11	30·15
Flemish Industrial Towns—					
Class I.	971	54·22	45·78	18·85	6·23
" II.	1417	45·31	54·69	25·19	15·10
" III.	2002	29·70	70·30	44·15	25·32

¹ Each two children under ten counting as one adult.

	BRUSSELS.			ANTWERP.			GHENT.			CHARLEROI.		
	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.
NUMBER OF HOUSES . . .	61	238	229	64	80	55	19	82	104	164	102	18
Percentage of houses having—												
Mansards	75.5	50.4	24.89	57.79	66.25	70.90	21	28	27	9.14	8.82	..
Attics	24.6	22.69	16.16	26.55	30	21.87	52	34	29	92.60	95.10	94.44
Persons sleeping in—												
Mansard	45.9	41.6	20.52	48.42	48.75	58.17	5	6	14.50	4.88	3.92	..
Attic	6.56	2.1	3.06	1.56	1.25	1.81	..	2.50	..	..	..	..
Kitchen ¹	3.28	2.94	5.67	..	8.75	12.72	..	1.25	10.50	..	0.98	..
Lodgers ²	13.12	2.52	0.44	4.69	1.25	3.62	..	1.25	5	6.71	6.85	..
Parlour	80.3	1.68	..	46.86	13.75	1.81	32	6	8	93.30	44.12	5.55
Passage ³	78.7	88.7	84.7	89.03	67.50	54.54	32	6	6	28.66	10.78	..
Cellar (one or more)	72.1	67.2	30.13	87.47	77.50	48.27	57	22	22	89.03	94.12	88.33
Outhouses	9.84	7.56	0.26	29.67	22.50	20.00	47	19	9.50	67.70	70.59	66.67
Gardens	57.4	29.0	9.61	23.43	30	18.18	..	2.50	..	75.61	87.37	77.78
Water-supply—												
Private	23.0	12.2	6.6	15.6	17.5	12.7	81.5	13.5*	11.5	20.1	9.8	5.6
In common with—												
Two to three households	67.2	62.2	34.5	68.7	51.3	29.1	10.5	8.5	1	9.2	8.8	5.5
Four to five ..	8.2	10.9	26.6	7.8	18.7	23.6	..	1	1	9.1	6.9	27.8
Six to ten ..	..	5.9	21.4	3.2	10	10.9	..	11	11.5	3.7	13.7	11.1
More than ten ..	1.6	8.8	10.9	4.7	2.5	23.7	58	71	75	57.9	60.8	50
Closets—												
Private	29.5	18.5	10	82.8	36.6	32.7	69	48	32.5	99.4	87.2	61.1
In common with—												
Two to three households	63.9	66.3	40.6	62.5	43.6	36.3	16	14	27	0.6	10.8	38.9
Four to five ..	6.6	7.2	24.9	3.1	13.6	20	5	33	19.5	..	2.0	..
Six to ten ..	..	6.3	18.4	1.6	6.2	3.7	..	9	14.5	..	..	..
More than ten ..	..	1.7	6.1	..	..	7.3	10	1	6.5	..	..	..
Washhouse	45.9	25.2	9.17	4.69	1.25	3.64	15.50	..	..	2.44	4.90	..
Workshop attached ⁴	6.56	3.36	0.44	7.81	1.25	..	6	1.25	..	2.44	0.98	..
Owned by occupier	9.84	..	..	3.12	5	..	..	..	..	17.68	8.82	..
Being tenements	62.3	74.4	82.5	73.41	13.75	54.54	..	..	1	..	0.98	..
Where sex promiscuity ⁵	21.3	47.5	23.58	9.37	5	21.81	21	20	14.50	6.16	6.85	11.12

¹ This percentage is not typical of houses of Class I. in Brussels and in Walloon industrial towns, but may be explained by the fact that a number of single persons occupying dwellings of one room are included in the total.

² It is interesting to note that in most districts the number of lodgers is largest in the better-class working men's houses, while in the mining region it is the poorest class which accommodates the largest number of lodgers. The return for Ghent obviously is based on too small a number to be considered accurate.

³ The large number of houses which have a passage in Brussels, Antwerp, and Walloon towns may seem surprising; it is due to the fact that many of the dwellings included are tenements for which apparently sometimes common staircases and landings have been counted as passages.

XXIX

CONDITIONS

HAINAUT (Borinage).			HAINAUT (Centre).			LIÉGE.			WALLOON (Industrial).			FLEMISH (Industrial).		
I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.
47	125	138	178	225	210	69	60	80	84	110	148	229	331	394
12·77	22·40	16·67	2·81	1·83	2·38	23	1	10	60·7	43·64	20·95	33·10	18·13	22·33
48·9	46·40	34·06	51·12	34·22	28·58	67	83	34	95·2	81·82	39·19	71·6	77·6	77·9
4·26	8·80	7·97	..	0·89	2·38	4½	1½	3½	52·4	32·73	17·57	5·67	10·88	13·20
..	..	0·71	..	..	..	3	3½	5	..	0·91	0·68	2·62	6·04	33·5
..	..	5·07	..	0·44	5·24	..	..	21	7·141	4·55	17·57	3·49	6·34	12·18
..	1·60	3·62	2·81	5·33	18·09	3	28½	9	22·6	4·55	4·05	6·96	8·63	1·78
68·10	40·00	17·25	88·7	64·0	26·19	96	76	5	92·9	24·55	0·68	88·60	45·00	16·24
25·5	13·60	4·35	56·7	19·11	2·38	19	15	1½	89·3	81·82	68·00	52·0	14·78	4·08
85·1	76·80	73·90	91·0	89·8	77·2	89	91½	74	88·1	53·64	12·97	83·40	65·9	33·5
51·00	49·60	49·28	64·6	26·44	26·19	53	21½	14	35·7	19·09	20·27	86·50	51·7	33·5
91·5	84·00	76·10	91·0	89·8	81·11	74	78½	78	54·8	28·18	6·80	81·00	34·7	17·51
76·6	58·4	30·6*	79·2	67·1	57·1	19	3·3	1	46·4	10	4·7	51·1	29·9*	9·9*
8·5	12·8	15·2	12·9	9·8	9·05	19	6·7	2·5	35·7	53·6	13·6	16·6	15·4*	14·0
2·1	10·4	7·2	3·9	9·8	9·05	9	13·3	7·5	4·1	14·6	16·2	7·8	10·9	13·9
4·3	7·2	10·8	3·4	8·9	12·9	3	5	10	4·7	10·9	17·6	5·7	15·4	23·1
8·5	11·2	36·2	0·6	4·4	11·9	50	71·7	79	7·1	10·9	47·9	18·8	28·4	39·1
93·6	91·2	67·4	97·8	92·5	85·2	81	83·3	67·5	50	14·5	12·2	97·8	89·1	73·7*
6·4	8·8	27·5	2·2	5·8	7·1	19	13·3	25	36·9	67·3	25	0·5	7·9	13·7
..	..	3·6	..	1·3	4·8	..	..	6·25	6·1	13·7	22·3	1·7	1·5	3·5
..	..	1·5	..	0·4	2·9	..	3·4	..	3·5	12·7	25·7	..	0·9	5·1
..	..	..	..	..	..	..	..	1·25	3·5	1·8	14·8	..	0·6	4·0
14·89	16·00	5·79	37·64	8·98	3·81	5	1½	3½	31·0	30·91	10·85	6·96	3·32	1·02
2·13	5·60	1·52	14·61	4·44	0·95	57	..	..	3·57	..	0·68	3·93	3·93	2·54
40·4	10·40	7·10	51·68	8·98	1·43	30	13½	..	3·93	4·55	0·68	4·80	0·30	0·51
..	..	..	1·12	2·22	5·71	3	3½	6½	35·7	82·73	72·80	0·44	0·30	3·05
2·13	16·80	32·61	7·30	5·78	23·33	33	38½	36	7·14	12·72	41·89	21·83	21·75	33·0

⁴ The intention of the question asked was to ascertain in how many cases the dwelling house was directly connected with a workshop, but it appears from the answers that a different interpretation has been placed on the question in different districts, and that sometimes only workrooms for industrial production have been counted, while in others purely domestic workshops have been included.

⁵ I.e. percentage of houses where unmarried persons over ten sleep in the same room with persons of the opposite sex.

* A small number of houses, the nature of whose water-supply or closet accommodation is unknown are here included.

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